United States Department of Health & Human Services

Enterprise Architecture Program Management Office

HHS Enterprise Transition Plan 2007

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Approvals

The Health and Human Services (HHS) Transition Plan describes gaps identified between current and future states of the organization, and plans and activities proposed or initiated by the Department and its Operating Divisions to fill those gaps. The Transition Plan also provides HHS strategies and interim milestones for implementing planned measures to achieve progress towards its target vision.

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Disclaimer

The information in this document is believed to be accurate and reliable. The origin of this information may be internal or external to the Department of Health and Human Services (HHS). The HHS EA Program staff have made all reasonable efforts to verify the information in this document.

Document Change History

Version Number	Release Date	Summary of Changes
n/a	2/28/2006	Previous Transition Plans were produced in 2005 and 2006
1.0	2/22/2007	Transition planning reflects FY2008 investments and initiatives

1 Introduction

The Department of Health and Human Services (HHS) Office of Enterprise Architecture manages an Enterprise Architecture (EA) Program, under the leadership of the HHS Chief Enterprise Architect (CEA). The Office of Enterprise Architecture within the Office of the Chief Information Officer (OCIO) oversees many of the Department's core strategic planning and accountability functions, including information security, capital planning and investment control, information resources strategic planning, and of course, enterprise architecture. The HHS EA Program fulfills multiple Federal mandates related to planning and managing information technology (IT) investments and supporting organizational effectiveness at the Department, Staff Division (STAFFDIV), and Operating Division (OPDIV) levels, and with relevant government-wide initiatives.

Key legislative and management drivers for the HHS EA Program include the Information Technology Management Reform Act of 1996 (Clinger-Cohen), the E-Government Act of 2002, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Government Performance Results Act of 1993 (GPRA), and guidance from the Office of Management and Budget (OMB) including Circulars A-11, A-127, and A-130. In addition, the HHS EA Program ensures the Department's compliance with OMB's Federal Enterprise Architecture (FEA) and Federal Transition Framework (FTF), and responds to regular EA maturity assessments performed by the Government Accountability Office (GAO) and OMB.

1.1 Document Structure

This Transition Plan is organized using the following structure:

Part 1 Introduction (this section) provides a general description of the purpose, scope and objectives, audience, approach, and methodology for the HHS Enterprise Transition Plan.

Part 2 Major HHS Initiatives summarizes the major current or planned initiatives for HHS in 2007. This section addresses high priority IT investments from the FY2008 IT portfolio, cross-segment themes and transition priorities, and cross-agency initiatives.

Part 3 Transition Planning Milestones reviews progress against milestones specified during the 2006 transition planning process, and summarizes key transition performance milestones targeted for 2007-2009.

Part 4 HHS Enterprise Architecture Transition focuses on the 2007 goals and objectives established for the HHS EA and the EA program activities that address them.

Appendix A HHS Priority Investments summarizes by HHS Segment the major and tactical IT investments within the FY2008 IT portfolio and the anticipated timeline for each investment.

Appendix B HHS Alignment to the FTF summarizes HHS IT investment alignment to each of the 18 mandatory Federal Transition Framework initiatives.

Appendix C HHS Enterprise Architecture Goals and Objectives summarizes the HHS EA Program-specific goals and objectives that drive 2007 EA activities.

1.2 Purpose

The Transition Plan describes gaps identified between current and future states of the organization, and plans and activities proposed or initiated by the Department and its Operating Divisions to fill those gaps. The Transition Plan also provides HHS strategies and interim milestones for implementing planned measures to achieve progress towards its target vision. Initiatives addressed in the Transition Plan include those associated with major and tactical investments specified in the FY2008 IT investment portfolio, as well as initiatives identified during the annual information resources management (IRM) strategic planning process.

The Transition Plan provides an annual status of accomplishments made in the previous year and anticipated progress to be made in the coming year. It reflects planned budgetary commitments as captured in the HHS IT portfolio and addresses mandated activities regardless of their actual funding status. In this way the Transition Plan can help HHS draw attention to obligations, strategic gaps, and other risk areas, and provide strategies for mitigating any such risks. The Transition Plan is also an important tool to support proper alignment of IT investments to business strategies and programs. This alignment will help HHS improve its programs' performance as measured by the Office of Management and Budget's Program Assessment and Rating Tool (PART).

1.3 Overview of this Document

This document, the HHS Enterprise Transition Plan 2007, describes the strategy and sequencing to evolve from HHS' current baseline, representing fiscal year 2007, to achieve the strategic vision articulated in the current HHS Information Resources Management Strategic Plan. The planning horizon for the IRM Strategic Plan is fiscal year 2012. The Transition Plan has a shorter-term perspective, generally cover a three-year span comprising the current fiscal year, the subsequent fiscal year (for which the proposed IT investment portfolio has already been approved), and the following fiscal year that is the focus of the current budget planning cycle. For the 2007 Transition Plan therefore, the planning horizon covers fiscal years 2007, 2008, and 2009. The transition from the baseline architecture to a target architecture consistent with the Department's vision is an iterative process.

The Transition Plan focuses on transitional activities and performance milestones for initiatives that, when fully implemented, will become part of the target architecture for HHS. Initiatives and projects that have already achieved implementation – including investments in operation and maintenance or "steady-state" phases – are already part of the target architecture and are therefore not emphasized in the Transition Plan.

The HHS Enterprise Transition Plan 2007 describes the major strategic and tactical drivers influencing the investments, initiatives, and activities on which HHS will focus in 2007-2009. Transition drivers include internal policies, plans, and initiatives as well as external mandates such as legislation, inter-agency agreements, and government-wide initiatives. The scope of this document includes significant enterprise initiatives and programs, prioritized IT investments, and plans and activities undertaken to align to or comply with federal initiatives in which HHS participates.

This document also includes a section describing the transition plan for the HHS EA Program. This year, the HHS EA Program has initiated several changes in approach, scope, and perspective, with the intent of enhancing the value demonstrated by the enterprise architecture in support of overall mission execution. In the future, the HHS EA Program will strive to more fully integrate business and IRM strategic planning, investment, and execution, including enabling consistent, effective, performance-based management.

Related documents that provide additional details of the HHS Transition Strategy and the enterprise architecture's role in enterprise transition include:

- The HHS Strategic Plan
- The HHS Information Resources Management Strategic Plan
- The HHS Performance Management Plan
- The HHS EA Governance Plan
- The HHS EA Program Management Plan
- The HHS EA Program Communications Plan
- The HHS EA Framework

This plan complements related HHS policies and guidance, including:

- HHS OCIO Policy for IT Capital Planning and Investment Control
- HHS OCIO CPIC Procedures
- HHS OCIO IT Policy for Enterprise Architecture
- HHS Enterprise Performance Life Cycle
- HHS Information Security Program Policy

1.4 Audience

The intended audience for the Governance Plan includes all HHS EA stakeholders, as well as those interested in the operational activities of the HHS EA Program. These stakeholders include:

- HHS Assistant Secretary for Resources and Technology (ASRT)
- HHS Chief Information Officer (OCIO)
- HHS Chief Enterprise Architect (CEA)
- HHS Information Technology Investment Review Board (ITIRB)
- HHS CIO Council
- HHS Enterprise Architecture Review Board (EARB)
- Program Staff supporting the HHS Enterprise Architecture
- HHS OPDIVs and staff involved Enterprise Architecture activities

- HHS OPDIV investment, business, and technical review boards
- HHS and OPDIV Capital Planning and Investment Control (CPIC) programs and staff
- HHS and OPDIV IT Program and Project Managers and staff, including contractors
- Business Owners of programs, investments, and business functional areas and processes
- Contractors supporting HHS Enterprise Architecture initiatives
- OMB Line of Business programs and staff, including Federal Health Architecture (FHA), Human Resources LOB, Financial Management LOB, Grants Management LOB, Information Systems Security LOB, and IT Infrastructure Optimization LOB
- Federal Health Information Technology programs and staff, including the Office of the National Coordinator for Health IT

1.5 Transition Planning Approach

The enterprise architecture is a strategic resource that helps HHS plan, invest in, and implement information technology solutions to meet business needs and help manage the IT investment portfolio. It provides a mechanism for understanding and managing complexity and change. EA products identify the alignment of organizational business and management processes, data flows, and technology. They also enable identification of capability gaps and duplication. The role of the enterprise architecture within the broader cycle of strategic planning and execution is reflected in the initial "Architect" phase of the iterative performance improvement lifecycle described by OMB, as depicted in Figure 1 (Source: FEA Practice Guidance, December 2006).

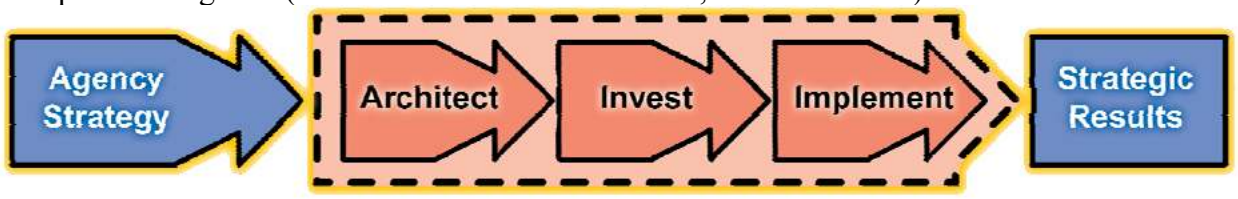


Figure 1: Performance Improvement Lifecycle

HHS is a large and diverse organization, with a broad mission and corresponding functional responsibilities at both the Department level and, especially, among the Operating Divisions. In order to identify mission-specific information resources management goals and objectives, the IRM strategic planning process is structured around the nine architectural segments defined by the HHS Chief Enterprise Architect:

1. Access to Care
2. Health Care Administration
3. Health Care Delivery
4. Health Care Research and Practitioner Education
5. Human Services

6. Population Health Management and Consumer Safety
7. Information Resources Management
8. Management of Government Resources
9. Planning and Accountability

Segments are discrete sets of business functions grouped according to similarities in mission, goals, objectives, and commonality of services and business processes. These segments represent nine functionally oriented communities of interest (COI). By focusing IRM strategic planning activities on segment-based perspectives, HHS is able both to capture and reflect mission-specific priorities and to identify commonalities across business area needs. This perspective helps ensure that strategic and tactical initiatives are planned and sequenced appropriately to focus appropriate efforts and resources on the areas of greatest impact for the enterprise. Individual initiative programs and investments maintain their own transition plans as part of program and project management, including establishing performance measures and milestones. In addition, HHS maintains Segment Transition Plans for each of the nine HHS Segments. The HHS Enterprise Transition Plan reflects a broader perspective covering all major initiatives, cross-segment priorities, and major milestones and commitments from high-priority initiatives and investments.

The HHS enterprise architecture provides multiple perspectives of current and future states of the Department and planned transitions over time towards the target vision. The HHS EA can be used to support planning and monitoring of initiatives, investments, and projects throughout their lifecycle. To enable this use of the EA, the enterprise architecture is embedded within the HHS Enterprise Performance Life Cycle EPLC – a 10-phase set of processes integrating capital planning and investment control, security, project management, enterprise architecture, and performance management disciplines. The EPLC is implemented at the individual investment or project level, and among other processes prescribes planning activities such as investment strategic alignment, gap analysis, business case development, and analysis of alternatives.

1.6 Methodology

The HHS Enterprise Transition Plan is produced and updated as a component of the annual strategic planning cycle. Beginning in 2006, the information resources management strategic planning process was modified to adopt a segment-based planning approach as a complement to enterprise-wide planning. The HHS Office of Enterprise Architecture convenes and facilitates a series of nine strategic planning workshops – one for each of the nine HHS Segments. Workshop participants include IT and business stakeholders responsible for functions, processes, and activities within each of the segments. The scope of activities for each workshop includes a review of existing strategic goals and objectives from both the HHS Strategic Plan (i.e., the business strategy) and the HHS IRM Strategic Plan, to establish a baseline for discussion of the need for additional objectives and outcomes to help achieve the target vision for each segment.

Both business-focused and IRM strategic planning follow a similar process for the tri-annual development and update of the HHS strategic plans. At the broadest strategic level, planning process participants identify long-term goals, organized according to mission-oriented

delineations of major activities across the Department and its Operating Divisions (OPDIVs). The goals articulate what the Department wants to achieve. A set of primary objectives is specified for each goal, to describe in more granularity what the Department will accomplish in pursuit of its goals. The planning process then focuses on the identification of discrete outcomes corresponding to different goals and objectives that, if realized, would demonstrate successful achievement of the goals and objectives. This hierarchy of goals, objectives, and outcomes provides the structure for the HHS Strategic Plan and the HHS IRM Strategic Plan.

The strategic goals, objectives, and outcomes provide a reference point for existing and proposed initiatives intended to help the Department realize its strategic vision. All HHS programs and initiatives are required to document the extent to which they support strategic goals and objectives. For IRM programs and initiatives, support of goals and objectives is currently captured in the HHS Enterprise Architecture; in the future, this alignment will be captured for the 300-plus programs that constitute HHS activities from an enterprise perspective. Strategic alignment is also a factor in the prioritization of IT investments that is used to structure the sequence of initiatives and investments. This sequencing plan is part of the transition strategy reflected in this Transition Plan.

The annual review of HHS strategic planning documentation and the update of the Transition Plan identifies current and existing initiatives and investments approved for inclusion in the IT portfolio for the current planning year. This process also identifies additional objectives and outcomes that may not have been incorporated in the strategic plans. Participants analyze the existing initiative and investment information against the collective set of objectives and intended outcomes, to identify any gaps between the baseline and target that are not adequately addressed by existing plans. This gap analysis, performed for each of the business areas comprising the nine HHS Segments, helps identify new or emerging themes in terms of required or desired capabilities that information resources can deliver. The existence of gaps in existing plans can also influence revision or re-prioritization of initiatives and planned investments, to encourage the most effective use of IRM resources.

Performance measures provide another important input to the transition plan. All current or proposed IT investments specify performance measurement indicators used to evaluate the success of the initiatives funded by the investment and, in most cases, to measure interim progress of the initiatives during their life cycles. HHS has developed a performance management framework – also structured using the nine HHS Segments – that provides guidance to investment owners as to appropriate types of measures that should be specified for their initiatives or projects. Using a common performance management framework across all IT investments helps HHS implement consistent performance-based evaluation of initiatives, and use the results of that evaluation to help determine transition strategy and adjust sequencing plans as necessary.

The HHS approach to performance management recognizes the difference inherent in relevant performance measures and milestones depending on the status and relative maturity of a program, project, or investment. Initiatives and activities identified in the Transition Plan have, for the most part, not yet achieved full implementation, completion or operational capability, so the milestones used to track the performance of these initiatives and activities are measures of

implementation.[1] Once full implementation and operational capability is achieved, HHS emphasizes the use of operational or outcome-driven performance measures and milestones, which are the focus of the HHS Performance Management Plan.

The Transition Plan addresses strategic planning drivers both internal and external to HHS, and several different types of initiatives and investments:

- Current and proposed investments up to and including the fiscal year 2008 IT portfolio;
- The subset of IT investments prioritized as "high priority" by HHS;
- Program-based initiatives, spanning multiple investments and projects;
- Strategic themes and potential new initiatives from the strategic planning process;
- Health IT initiatives in which HHS is a partner, member, or participant;
- Cross-agency federal initiatives including the Federal Transition Framework and E-Gov.

A single HHS initiative or investment may correspond to more than one of the above drivers.

[1] The use of distinct kinds of measures and milestones to reflect implementation is consistent with federal guidance on performance management and the selection of appropriate performance measures, including NIST Special Publication 800-55, *Security Metrics Guide for Information Technology Systems* and the Government Performance and Results Act of 1993 (GPRA).

2 Major HHS Initiatives

2.1 High Priority HHS Investments

The complete HHS IT investment portfolio comprises over 650 discrete investments, approximately 100 of which are categorized as major or tactical. These 100 investments represent in excess of 85% of the HHS discretionary information technology budget. The major and tactical investments together constitute the list of prioritized investments subject to explicit review and analysis for alignment to and compliance with the HHS enterprise architecture. As part of the portfolio management processes managed by the Capital Planning and Investment Control (CPIC) Program, HHS designates a subset of the IT investment portfolio as "high-priority" investments, based on a number of criteria including mission-criticality, size, scope, and complexity. This section provides a description and summarizes the status of each of the high-priority HHS investments, including implementation milestones for those investments not yet fully implemented, and annual performance measurement indicators for operational investments. Detailed descriptions of actual performance results against planned performance milestones, including cost and schedule variances tracked and reported under earned value management, are available in the individual information technology investment documentation.

2.1.1 CDC PHIN: BioSense

With the increasing concern for a possible pandemic of a naturally occurring disease such as influenza, as well as the ever present potential of a bioterrorism event, the Centers for Disease Control and Prevention (CDC) is actively working to improve the nation's biosurveillance capabilities through BioSense. BioSense is a national program intended to improve the nation's capabilities for conducting near real-time biosurveillance, enabling health situational awareness through access to existing data from healthcare organizations across the country. The primary objective is to expedite event recognition and response coordination among federal, state, and local public health and healthcare organizations by providing each level of public health access to the same data, at the same time. In other words, if a bioterrorism event or a disease outbreak occurs, every level of public health will be able to see healthcare data from their community in near real-time. BioSense is one of several initiatives leveraging the CDC Public Health Information Network (PHIN). BioSense is an operational program which has recently emphasized rapid expansion in the number of real-time data sources incorporated in BioSense through hospitals and public health departments.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Cycle Time	Time required to update BioSense data	2.81 hours from "Time of Visit" to "Viewable in BioSense application"	No more than 2 hours from "Time of Visit" to "Viewable in BioSense application"

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Population Health Management and Consumer Safety	# of health interactions in key jurisdictions related to early detection and quantification of possible bioterrorism events.	36 million records	Increase by 10% over the previous year's volume the number of health interactions related to the early detection and quantification of possible bioterrorism events that are made available for analysis to local, state, federal public health agencies
2007	New Customers and Market Penetration	% of eligible customer services	50% of State and local public health agencies in key jurisdictions have to access BioSense data	75% of State and local public health agencies in key jurisdictions have to access BioSense data
2007	External Data Sharing	# of data sources	11 data sources and 39 hospitals sending foundational data	CDC acquires sources from 60 potential data sources and 1100 hospitals
2008	Population Health Management and Consumer Safety	# of health interactions in key jurisdictions related to the early detection and quantification of possible bioterrorism events.	TBD	Increase by 10% over the previous year's volume the number of health interactions related to the early detection and quantification of possible bioterrorism events that are made available for analysis to local, state, federal public health agencies
2008	New Customers and Market Penetration	% of state and local Public Health Department's serviced in key jurisdictions	TBD	60% of State and local public health agencies in key jurisdictions have to access BioSense data
2008	External Data Sharing	# of data sources	TBD	CDC acquires sources from 100 potential data sources and 1100 hospitals
2008	Cycle Time	Time required to update BioSense data	TBD	No more than 2 hours from "Time of Visit" to "Viewable in BioSense application

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2009	Population Health Management and Consumer Safety	# of health interactions in key jurisdictions related to the early detection and quantification of possible bioterrorism events.	TBD	Increase by 10% over the previous year's volume the number of health interactions related to the early detection and quantification of possible bioterrorism events that are made available for analysis to local, state, federal public health agencies
2009	New Customers and Market Penetration	% of state and local Public Health Department's serviced in key jurisdictions	TBD	85% of State and local public health agencies in key jurisdictions have to access BioSense data
2009	External Data Sharing	# of data sources	TBD	CDC acquires sources from 200 potential data sources and 3200 hospitals
2009	Cycle Time	Time required to update BioSense data	TBD	No more than 2 hours from "Time of Visit" to "Viewable in BioSense application

2.1.2 CMS Beneficiary Enrollment and Plan Payment

This investment was proposed as a large-scale, integrated system to deliver the functions of Title I and Title II of the Medicare Prescription Drug, Improvement and Modernization Act (MMA) that was signed into law in December 2003. This landmark legislation provides senior citizens and people with disabilities with a prescription drug benefit, more health care choices and improved benefits under Medicare, and is the most significant improvement to senior health programs in nearly 40 years. Two important provisions of the MMA are Title I, the voluntary prescription drug benefit under Medicare Part D, and Title II, the enhanced health plan choices in the Medicare Advantage program under Medicare Part C.

For the FY2008 budget year, this investment focuses on a subset of the larger investment that relates to the Beneficiary Enrollment and Plan Payment function. To implement the provisions of both Title I and Title II of MMA–Beneficiary Enrollment and Plan Payment, CMS identified three business functions impacted by the legislation that are aligned to the business lines of the CMS Enterprise Architecture: Beneficiary Enrollment and Plan Payment Calculation; Premium Withholding Calculation; and Plan Payment Calculation. This investment was last presented to the CMS ITIRB for review on March 27, 2006. It is a mixed life-cycle investment, currently in the "control" phase of the CMS capital planning and investment control (CPIC) process.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Health Care Administration	Percentage of legislative requirements met	90%	95%
2007	Efficiency	Accuracy of beneficiary-level withholdings and LICS; plan-level payments; beneficiary-level payments	85%	90%
2007	Access to Care	Number of enrollments of eligible beneficiaries to the program	97%	97.9
2007	External Data Sharing	Data sharing ability	95%	95
2007	Response Time	Number of payments calculated vs. # of complaints received	90%	95.9%
2008	Health Care Administration	Percentage of legislative requirements met	95%	100%
2008	Efficiency	Accuracy of beneficiary-level withholdings and LICS; reinsurance subsidy, and risk corridor cost payment calculations; plan-level payments; beneficiary-level payments	90%	100%
2008	Access to Care	Enrollment of eligible beneficiaries to the program	99%	100
2008	External Data Sharing	Data sharing ability	99%	100%
2008	Response Time	Number of payments calculated verse number of complaints received. Complaints received regarding calculation of payments.	99%	100%
2009	Delivery Time	# of plans enrolled vs. number of complaints received. Complaints received regarding plan enrollments	TBD	TBD

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2009	External Data Sharing	Data sharing ability	TBD	TBD
2009	Response Time	# of payments calculated vs. # of complaints received. Complaints received regarding calculation of payments	TBD	TBD
2009	Health Care Administration	Percentage of legislative requirements met	100%	100%
2009	Efficiency	Accuracy of beneficiary-level withholdings and LICS; reinsurance subsidy, and risk corridor cost payment calculations; plan-level payments; beneficiary-level payments	100%	100%

2.1.3 CMS Drug Claims (DDPS)

CMS Drug Claims is part of the programs initiated in conjunction with the Medicare Modernization Act. The claims data functions will serve a number of critical purposes including effective management and oversight of the Part D benefit (including quality and cost), support of quality improvement and medication therapy management activities, collection of new evidence about risks, benefits and costs of prescription drugs and prescribing practices, and reconciliation of payments made to plans in the areas of Low Income Cost Sharing (LICS), Federal Reinsurance, and risk sharing/risk corridors (when paired with prospective and actual claims data). Medicare will obtain a specific set of Part D claims data consisting of 30 data elements from all drug claims. The prescription drug event records are submitted electronically to CMS on a monthly basis, and validated and stored in a Drug Claims Data repository. The data will further be utilized in the payment reconciliation process of comparing actual expenditures to prospective payments made to plans and correcting any overages or underpayments to plans. The Drug Claims module will process all Medicare covered and non-covered prescription drug events (PDEs), including non-Medicare PDEs for Medicare beneficiaries. The module will consist of the transaction validation and authentication processing, storing and maintaining the PDE data in a large-scale database, and staging the data into data marts to support beneficiary and plan analysis of incurred payments. It is a mixed life-cycle investment, currently in the CPIC "control" phase, and was last reviewed by the ITIRB in May of 2006.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Health Care Administration	Percentage of legislative requirements met	100%	100% compliance

2007	External Data Sharing	Percentage of claims processed electronically	100%	100%
2007	Accuracy of Service or Product Delivered	Percentage of PDEs rejected.	15%	12%
2007	Errors	Accuracy rate of DDPS data reported and calculated.	TBD	99% accuracy
2007	Timeliness	Number of months where provision of response report within 72 hours has occurred more than once.	10	5
2008	Health Care Administration	Percentage of legislative requirements met.	100%	100%
2008	External Data Sharing	Percentage of claims processed electronically.	100%	100%
2008	Accuracy of Service or Product Delivered	Percentage of PDEs rejected.	TBD	10%
2008	Errors	Accuracy rate of DDPS data reported and calculated.	TBD	99% accuracy
2008	Timeliness	Number of months where provision of response report within 72 hours has occurred more than once.	TBD	4
2009	Health Care Administration	Number of modifications required to update software.	TBD	10
2009	Response Time	Number of months where provision of response report within 72 hours has occurred more than once.	TBD	4
2009	Accuracy of Service or Product Delivered	Percentage of PDEs rejected	TBD	9%
2009	Errors	Accuracy rate of DDPS data reported and calculated.	TBD	99%

2.1.4 CMS Healthcare Integrated General Ledger Accounting System (HIGLAS)

The Healthcare Integrated General Ledger Accounting System (HIGLAS) is a component of the department-wide effort of Health and Human Services Unified Financial Management System (UFMS). CMS is coordinating with HHS development efforts to ensure CMS HIGLAS core financial data can be integrated with UFMS. The unification of the systems is aimed at improving data consolidation and financial reporting capabilities for the Department and CMS. HIGLAS will provide CMS a financial management system to account for the billions of dollars spent on Medicare benefits each year. HIGLAS represents the consolidation of two major CMS projects within the office of the CMS Chief Financial Officer. The first project, the Integrated General Ledger and Accounting System (IGLAS) project, was initiated to improve the accounting and financial management processes used by CMS's Medicare contractors to administer the Medicare Parts A and B programs. The Medicare contractors' accounts receivable, accounts payable, general ledger, and several reporting processes were deemed in particular need of improvement. The second project was an effort to improve the agency's central administrative accounting and financial management processes. This project, referred to as the Financial Accounting and Control Systems (FACS) redesign, entailed a replacement of CMS's legacy accounting system and the systems that currently support its procurement, travel management, grants management, and asset management. These two activities were combined into the HIGLAS project. UFMS is a business transformation effort designed to integrate department-wide financial management systems and operations by aligning the Department's businesses with modern technological capabilities. HIGLAS is an operational system included in the Department's target architecture for financial management services.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Reporting and Information	Maintain the annual Clean financial audit opinion	Clean audit opinion	Maintain baseline
2007	Reporting and Information	Number of material weaknesses cited in the financial audit	3	1
2007	Service Efficiency	Number of contractors trained on HIGLAS	2	11
2007	Reliability	Time required to produce CMS requested reports	Highly variable due to multiple external factors.	HIGLAS will eliminate/reduce the need for ad hoc labor intensive reports. Senior managers can use financial information for decision-making.
2007	Efficiency	Ability to accurately assess the availability of program funds on a daily basis	No ability	Fund information is available for those contractors who have transitioned to HIGLAS.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Availability	Number of Medicare contractors that can produce standing reports as requested	No standardization	11
2007	Internal Data Sharing	The need to cross-walk data between data of different architectures and process	Continuous need on the legacy systems	Little or no cross-walking required
2007	Functionality	Number of supplemental financial systems (cuff systems) needed to supplement the existing financial management systems	68 Cuff Systems	Reduce baseline by 1/2
2008	Reporting and Information	Maintain the annual Clean financial audit opinion	Clean audit opinion	Maintain baseline
2008	Reporting and Information	Number of material weaknesses cited in the financial audit	3	0
2008	Service Efficiency	Number of contractors trained on HIGLAS	2	17
2008	Reliability	Time required to produce CMS requested reports	Highly variable due to multiple external factors.	HIGLAS will eliminate/reduce the need for ad hoc labor intensive reports. Senior managers can use financial information for decision-making.
2008	Efficiency	Ability to accurately assess the availability of program funds on a daily basis	No ability	Fund information is available for those contractors who have transitioned to HIGLAS.
2008	Availability	Number of Medicare contractors that can produce standing reports as requested	No standardization	17
2008	Internal Data Sharing	The need to cross-walk data between data of different architectures and process	Continuous need on the legacy systems	Little or no cross-walking required

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2008	Functionality	Number of supplemental financial systems (cuff systems) needed to supplement the existing financial management systems	68 Cuff Systems	Reduce baseline by 1/2
2009	Reporting and Information	Maintain the annual Clean financial audit opinion	Clean audit opinion	Maintain Baseline
2009	Service Efficiency	Number of contractors trained on HIGLAS	2	17
2009	Efficiency	Ability to accurately assess the availability of program funds on a daily basis	No ability	Fund information is available for those contractors who have transitioned to HIGLAS
2009	Reliability	Time required to produce CMS requested reports	Highly variable due to multiple external factors	HIGLAS will eliminate/reduce the need for ad hoc labor intensive reports. Senior managers can use financial information for decision-making.

2.1.5 Federal Health Architecture – Managing Partner

The Federal Health Architecture (FHA) was established as an E-Gov Line of Business as part of the President's Management Agenda, which called for increased efficiency and effectiveness in government operations. FHA is currently included as a mandatory initiative in the Federal Transition Framework. The FHA is responsible for leveraging federal expertise in creating a federal framework that would be derived from a national health IT infrastructure; supporting federal activities in the development and adoption of health IT standards; and ensuring that federal agencies can seamlessly exchange health data among themselves, with state, local and tribal governments, and with private sector healthcare organizations. The FHA is managed within the Office of the National Coordinator for Health IT (ONC) at HHS and is driven by the President's health IT plan, which calls for the widespread use of interoperable electronic health records by 2014. HHS serves as the managing partner for FHA, working with the Departments of Defense and Veterans Affairs as lead partners. HHS contributes the majority of funding to the FHA program through this investment. The FHA program is operational, and is currently emphasizing support for standards development and other enablers of health information exchange initiatives managed under the Office of the National Coordinator.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Enterprise Architecture	Develop Way-Forward Plan for FHA aligned with the President's health IT plan	Plan not developed	complete by October 31st , 2006
2007	Strategic Planning	Develop annual performance plan	Plan not developed	establish plan and baseline by Oct 31st, 2006
2007	New Customers and Market Penetration	# of outreach activities per quarter	0	2
2007	Knowledge Management	Develop Knowledge Repository	Repository not developed	Developed Repository
2007	Frequency and Depth	# of use cases developed per year	Currently 0 have been completed	2
2007	Interoperability	% of agencies who participate in HITSP interoperability testing	Currently 0%	40%
2007	Compliance and Deviations	% of agencies who are compliant with the Presidents Executive Order to develop Health standards implementation plan	Currently 0%	40%
2008	Enterprise Architecture	% of federal stakeholder departments that have an FHA alignment plan. (Link to FHA goal # 1)	43% (3 of 7) have plans in place (2005)	100% of federal stakeholder departments have FHA-PMO approved plans in place
2008	Public Relations	# of eNewsletters sent	0 sent to date	12 sent by the end of the year
2008	Customer Satisfaction	% of the partner agencies and FEA PMO who are satisfied with the results of the FHA to date (Link to FHA goal # 1)	Baseline will be established in FY 06.	20% improvement in stakeholder satisfaction over the previous year
2008	Frequency and Depth	# of use cases developed per year	2 developed	8 use cases developed
2008	Interoperability	% of agencies who participate in HITSP Standards Development	25%	50%

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2008	Data Standardization or Tagging	% of Partner agency employing HITSP standards	Target 0 The first HITSP standards will be published in 2008	1 HITSP standard published
2008	Compliance and Deviations	% of agencies who are compliant with the Presidents Executive Order to develop Health standards implementation plan	Currently 0%	40%

2.1.6 Grants.gov – Find and Apply

Grants.gov is a single, authoritative source for finding information on, and applying for, all competitive grant opportunities. Grants.gov includes more than $350 billion in annual grants from 26 Federal agencies and enables grantors and the grant community to come together to make grants management easier and more efficient for everyone. State, local, and tribal governments, colleges and universities, non-profits and other organizations have the access they need through "grants.gov" to efficiently find grant opportunities in just one convenient online location – saving both grantors and the grant community time and money. HHS serves as the managing partner for grants.gov. Within HHS, the Office of Grants falls under the Assistant Secretary for Resources and Technology. The Office of Grants Systems Modernization (OGSM) provides key leadership and oversight on HHS and government-wide electronic grant activities including grants.gov management and implementation.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	External Data Sharing	# of applications received electronically in the Fiscal Year	75,566 (8/7/06)	130,000
2007	Information Management	# of agencies posting Apply packages	26 (8/7/06) Maintain	26
2007	Compliance	# of discretionary grant programs available for electronic application through Grants.gov for the Fiscal Year	1,895 (8/7/06)	3,200
2007	Customer Services	Overall customer satisfaction with the Grants.gov site. (Foresee Tool)	57% (7/24/06)	60%

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Participation	Likeliness of the Grants Community to use Grants.gov as their primary resource (Foresee Tool)	63% (7/27/06)	70%
2007	New Customers and Market Penetration	Likeliness of the Grants Community to return to the Grants.gov site (Foresee Tool)	75% (7/27/06)	85%
2007	Customer Retention	Users ability to accomplish what they wanted on the Grants.gov site (Foresee Tool)	60% (7/27/06)	70%
2008	Customer Satisfaction	# of applications received electronically	75,566 (8/7/06)	170,000
2008	Frequency and Depth	Overall customer satisfaction with the Grants.gov site. (Foresee Tool)	57% (7/24/06)	60%
2008	Customer Satisfaction	Likeliness of the Grants Community to use Grants.gov as their primary resource (Foresee Tool)	63% (7/27/06)	70%
2008	Customer Retention	Likeliness of the Grants Community to return to the Grants.gov site (Foresee Tool)	75% (7/27/06)	85%
2008	Customer Retention	Users ability to accomplish what they wanted on the Grants.gov site (Foresee Tool)	60% (7/27/06)	70%
2009	User Satisfaction	# of applications received electronically	75,566 (8/7/06)	170,000
2009	Customer Satisfaction	Overall customer satisfaction with the Grants.gov site. (Foresee Tool)	57% (7/24/06)	60%

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2009	Customer Services	Likeliness of the Grants Community to use Grants.gov as their primary resource (Foresee Tool)	63% (7/27/06)	70%
2009	Customer Satisfaction	Likeliness of the Grants Community to return to the Grants.gov site (Foresee Tool)	75% (7/27/06)	60%
2009	Customer Services	Users ability to accomplish what they wanted on the Grants.gov site (Foresee Tool)	60% (7/27/06)	85%

2.1.7 HHS Human Resources LOB Information Technology

The Health and Human Services Program Support Center (PSC) was selected by the Office of Management and Budget (OMB) and the Office of Personnel Management (OPM) as one of the federal government's five Human Resources Shared Service Centers (SSCs). HHS currently makes available a standard set of Human Resource Services, including payroll services, benefits administration, compensation services, and personnel action processing. HHS leverages its Capital HR system, comprising several different COTS-based service components, to deliver its HR services to internal and external customers. The objective of the HR LOB is to create a framework for a Government-wide, modern, cost effective, standardized, and interoperable HR solution that provides common core functionality and maximizes automation of processes to support the PMA initiative of strategic management of human capital. The HR LOB common solution takes a phased approach to delivering HR services through SSCs that are based on a common, reusable architecture that leverage " Plug and Play" architecture concepts. HR LOB is a market driven approach where service providers compete for government business and are driven to provide the best services and innovative solutions at the lowest cost. HHS has made several investments in recent years that place it in an excellent and qualified position to provide HR LOB services.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Human Resources Development	Requirements gathering and publication for core requirements functions: Personnel Actions and Compensation and Benefits Management	5	1
2007	Service Efficiency	Consolidation of HRC Process	0% as of 2007	Improve Baseline by 90%

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Policies	Compress the 5 HRC Policies	0% as of 2007	Improve baseline by 90%
2007	Compliance and Deviations	Consolidation of Physical HRCs	5	2
2008	HR Strategy	Add new SSC Customer	0	1
2008	Customer Impact or Burden	Implementation of Near Term SSC Requirements to new customer	0% as of 2008	Improve baseline by 100%
2008	Innovation and Improvement	Implementation of New Customer Near term SSC requirements	0 % as of 2008	Improve baseline by 75%
2008	Compliance and Deviations	Reduction of Call Center Support personnel	100	80
2009	Human Resources Development	Implementation of New Customer	0	1
2009	Customer Impact or Burden	Reduce Response Time	TBD	50%
2009	Innovation and Improvement	Implementation of New Customer Near term SSC requirements	75% as of 2009	Improve baseline by 25%
2009	Data Standardization or Tagging	Percent of Processes Converted	0% as of 2009	Improve baseline by 100%

2.1.8 HHS Unified Financial Management System

The Unified Financial Management System (UFMS) is a business transformation effort, designed to integrate department-wide financial management systems and operations by aligning the Department's businesses with modern technological capabilities. UFMS will replace five legacy financial systems with one modern accounting system. UFMS will use a Web-based commercial off-the-shelf product to satisfy the three categories of financial management systems requirements mandated by the Federal Financial Management Improvement Act (FFMIA). The business need for the UFMS Project, to eliminate redundant and outdated financial systems by implementing a modern integrated HHS-wide system, was presented and approved by the HHS ITIRB in June 2002. The requirements analysis identifying the business alignment, alternatives, benefits, costs, performance, risks, returns, and interoperability was presented and approved by the HHS ITIRB in November 2002 closing the CPIC Select Phase for the UFMS Project.

UFMS has successfully deployed to all planned Operating Divisions to provide standardized financial management services, with the exception of NIH and CMS, which continue to be supported by OPDIV-specific systems integrated to UFMS. The target vision for UFMS includes a combined service provision model comprising both the HHS UFMS and CMS HIGLAS systems. UFMS represents the foundation for HHS to provide financial management services to external agencies under the Financial Management Line of Business initiative. UFMS is a mixed life-cycle investment, and has achieved partial implementation across the Department.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Quality	Achievement of clean audit opinion.	2006 audit opinion.	Maintain a clean audit opinion.
2007	Customer Satisfaction	# and/or % of customers satisfied (defined as achieving a 4 or higher) such as number of internal HHS users, and stakeholders satisfied with UFMS.	2006 customer satisfaction rate.	Maintain and/or improve customer satisfaction rate.
2007	Customer Satisfaction	% of customers satisfied (defined as achieving a 4 or higher) with retrieval and accessibility of financial management information, including ease of online use.	2006 customer satisfaction (with retrieval and accessibility) rate.	To be determined.
2007	Efficiency	Total average cost per hour of producing monthly and annual reports.	$72/hour (excludes CMS)	To be determined (maintain or improve monthly and annual reconciliation and reporting costs.).
2007	Productivity	Total time for conducting monthly and annual reconciliation activities, (includes investigating discrepancies).	60,596 man-hours (excludes CMS)	To be determined (maintain or improve monthly and annual reconciliation and reporting hours).
2007	Human Capital	Staffing levels of HHS financial management staff.	566	Continue to identify opportunities for financial management FTE reduction.
2007	Availability	UFMS uptime.	Average scheduled 2004 uptime for HHS FMS.	To be determined.
2008	Quality	Achievement of clean audit opinion.	2007 audit opinion	Maintain a clean audit opinion.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2008	Customer Satisfaction	# and/or % of customers satisfied (defined as achieving a 4 or higher) such as number of internal HHS users, and stakeholders satisfied with UFMS.	2007 customer satisfaction rate.	Maintain and/or improve customer satisfaction rate.
2008	Customer Satisfaction	% of customers satisfied (defined as achieving a 4 or higher) with retrieval and accessibility of financial management information, including ease of online use.	2007 customer satisfaction (with retrieval and accessibility) rate.	To be determined.
2008	Efficiency	Total average cost per hour of producing monthly and annual reports.	$72/hour (excludes CMS)	To be determined (maintain or improve monthly and annual reconciliation and reporting costs.).
2008	Productivity	Total time for conducting monthly and annual reconciliation activities, (includes investigating discrepancies).	60,596 man-hours (excludes CMS)	To be determined (maintain or improve monthly and annual reconciliation and reporting hours).
2008	Human Capital	Staffing levels of HHS financial management staff.	566	Continue to identify opportunities for financial management FTE reduction.
2008	Availability	UFMS uptime.	Average scheduled 2004 uptime for HHS FMS.	To be determined.
2009	Quality	Achievement of clean audit opinion.	2008 audit opinion	Maintain a clean audit opinion.
2009	Customer Satisfaction	% of customers satisfied (defined as achieving a 4 or higher) with retrieval and accessibility of financial management information, including ease of online use.	2008 customer satisfaction (with retrieval and accessibility) rate.	To be determined.
2009	Availability	UFMS uptime.	Average scheduled 2004 uptime for HHS FMS.	To be determined.

2.1.9 IHS Resource and Patient Management System (RPMS)

The RPMS is a clinical and patient administrative information system that serves to manage the healthcare needs of the American Indian and Alaska Natives populations. RPMS is an integrated solution for the management of clinical, business practice and administrative information in healthcare facilities of various sizes. Flexible hardware configurations, over 50 software applications, and appropriate network communication components combine to provide a comprehensive clinical, financial, and administrative solution. This solution is in use at most health care facilities within the Indian health care delivery system. Indian Health Service has specified an electronic health record modeled on the Veterans Health Administration (VHA) electronic medical record, the Computerized Patient Record System (CPRS). CPRS has been successfully deployed across the VHA hospital network over the past several years.

By using a component-based architecture, the EHR enables implementation of a variety of clinical functional components, including IHS-developed components, components adapted from VHA software, and, potentially, commercial products (COTS) that have been adapted to framework technology. Among the advantages of componentization is the ability to add or modify GUI components without reinstalling the entire application. In addition, the user interface is highly customizable, permitting each facility to offer a variety of tab and component arrangements that accommodate the different information and workflow needs of various users. RPMS is an operational system currently supporting health care delivery across all Indian Health Service facilities. It also provides functional and technical examples to the federal Health IT community of an integrated large-scale distributed infrastructure to create, manage, and exchange electronic health records based on a model of component reuse.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Health Care Delivery Services	Percentage of at-risk patients who have a comprehensive assessment for all Cardiovascular Disease-related risk factors.	Baseline TBD in FY2007	Establish the baseline percentage
2007	Health Care Delivery Services	Percentage of patients screened for depression.	Baseline TBD in FY2006	Maintain at the FY2006 rate
2007	Health Care Delivery Services	Percentage of women screened at health care facilities for domestic violence.	14% (FY06 target)	Increase rate to 15%
2007	Health Care Delivery Services	Percentage of Childhood Immunizations ages 19-35 months.	FY2005 rate of 75%	Maintain rate of 75%

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Health Care Delivery Services	Percentage of Adult Immunizations: Pneumovax vaccination among adult patients age 65 years and older	72% (based on FY2006 target)	Increase rate to 76%
2007	Health Care Delivery Services	Percentage of appropriate female patients screened for Fetal Alcohol Syndrome	FY2006 target of 12%	Increase the rate to 13%
2007	Customer Impact or Burden	Number of sites with Electronic Health Record	Target from FY2006 (60 sites)	Implement EHR at 40 additional sites.
2007	Productivity	Percentage of National clinical performance data of registered population	86% of the registered population.	Increase by 1% over FY2006 levels.
2007	External Data Sharing	Number of states with which IHS currently exchanges immunization data	FY2006 target of 6 states	Increase to 8 the number of states
2007	Internal Data Sharing	Percentage increase in the number of new electronic images and scanned document available online	Baseline to be determined in FY2006	10% over baseline
2007	Data Reliability and Quality	Number of sites with patient safety measurement system	3 reporting areas	Deploy to 10 sites
2008	Health Care Delivery Services	The percentage of risk patients who have a comprehensive assessment for all Cardiovascular Disease-related risk factors	Baseline TBD in FY2006	Maintain at FY07 target
2008	Health Care Delivery Services	Percentage of patients screened for depression	Baseline TBD in FY2006	Maintain at FY07 target
2008	Health Care Delivery Services	Percentage of women screened at health care facilities for domestic violence	15% (FY07 target)	Increase the rate to TBD % over FY2007 target (percentage is tied to GPRA indicators)

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2008	Health Care Delivery Services	Percentage of Childhood Immunization ages 19-35 months	FY2005 rate of 75%	Maintain rate of 75%
2008	Health Care Delivery Services	Percentage of Adult Immunizations: Pneumovax vaccination among adult patients age 65 years and older	76% (based on FY2007 target)	Maintain at the FY2007 target rate of 76% of user patient population (pending final approval)
2008	Health Care Delivery Services	Percentage of appropriate female patients screened for Fetal Alcohol Syndrome	FY2007 target of 13%	Increase the rate of XX% (rate pending final approval)
2008	Customer Impact or Burden	Number of sites with Electronic Health Record	Target baseline is 100 sites	Implement Electronic Health Record at TBD sites
2008	Productivity	Percentage of National clinical performance data of registered population	86% of the registered population.	Increase by 1% over FY2007 levels.
2008	External Data Sharing	The number of states with which IHS currently exchanges immunization data	Baseline consists of 8 states (from previous targets)	Increase to 10 the number of states.
2008	Internal Data Sharing	Percentage of number of new electronic images and scanned documents available online.	Baseline to be determined in FY2006	10% over FY2007 target
2008	Data Reliability and Quality	Number of sites with patient safety measurement system	10 sites	Increase TBD# over FY07 target
2009	Health Care Delivery Services	The percentage of risk patients who have a comprehensive assessment for all Cardiovascular Disease-related risk factors	Baseline TBD in FY2006	Maintain at FY07 target
2009	Health Care Delivery Services	Percentage of patients screened for depression	Baseline TBD in FY2006	Increase TBD% over FY2008 target

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2009	Health Care Delivery Services	Percentage of women screened at health care facilities for domestic violence	15% (FY07 target)	Increase the rate to TBD% over FY2008 target
2009	Customer Impact or Burden	Number of sites with Electronic Health Record	100 sites	Implement Electronic Health Record at TBD sites
2009	Productivity	Percentage of National clinical performance data of registered population	86% of registered patient population	Increase by TBD% over FY08 target
2009	Data Reliability and Quality	Number of sites with patient safety measurement system	Target baseline from FY2008	Increase TBD# over FY08 target

2.1.10 NIH OD Electronic Research Administration (eRA)

Electronic Research Administration (eRA) is one of the two designated target systems on which HHS is relying to establish grants management services to internal and external agencies as part of the Grants Management Line of Business initiative. The eRA system provides the technology that allows the NIH Office of Extramural Research (OER) to efficiently administer biomedical research grants. It process over 50,000 applications and awards grants totaling $15-20 billion each year. eRA is an operational system included in the Department's target architecture for grants management services.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	IT Infrastructure Maintenance	% new architecture plan completed	0% new architecture plan completed. Current architecture is inadequate to respond to rapidly changing requirements and new users. A new architecture is needed.	100% of new Architecture plan to develop new eRA Enterprise Business and Data Architectures to meet Grants Line of Business objectives is done.
2007	Availability	System Availability %	95% availability of applications, excluding scheduled downtime (Projected).	eRA system logs will show that application availability is at or above the 96% level.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Efficiency	% of business transactions done electronically	40% of business transactions done electronically. Most of the receipt of electronic applications and electronic progress reports and elimination of paper mailers have been implemented. Workflow has been partially implemented. (Projected)	55% of business transactions done electronically. Almost all applications & progress reports are being received electronically. Workflow & eRequests have been implemented for more than one business area, and paper mailers have been eliminated.
2007	Data Storage	% document types stored electronically	45% of documents stored electronically. The business plan to enhance the electronic grant folder has been implemented. (Projected)	100% of documents stored electronically. Formulate a plan to have users replace paper folder with electronic grant folder as official file. (Projected)
2008	IT Infrastructure Maintenance	% Completion of best alternative architecture selection completed	0% of best alternative architecture selection completed. (Projected)	100% of best alternative architecture selection completed.
2008	Availability	System Availability %	96% availability of applications, excluding scheduled downtime (projected).	eRA system logs will show that application availability is at or above the 97% level.
2008	Customer Satisfaction	% of satisfied customers	% of Satisfied Customers is known only by anecdotal information. No formal survey has been conducted.	% of Customer Satisfaction is known. A survey will be planned and conducted to determine user satisfaction and identify areas where improvement is needed.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2008	Efficiency	% of business transactions done electronically	55% of business transactions done electronically. Almost all applications & progress reports are being received electronically. Workflow & eRequests have been implemented for more than one business area, and paper mailers have been eliminated.	80% of business transactions done electronically
2008	Data Storage	% of Institutes replacing paper folders	0% of Institutes replacing paper folders. Plan to transition from file room storage in NIH institutes to the adoption of electronic files is in place. (Projected)	At least 10% of Institute replace paper folders with electronic grants folder.
2009	IT Infrastructure Maintenance	% of selected Architecture implemented, deployed and migrated	0% of selected Architecture implemented, deployed and migrated. (Projected)	25% of selected Architecture implemented, deployed and migrated.
2009	Availability	System Availability %	97% availability of applications, excluding scheduled downtime (projected).	eRA system logs will show that application availability is at or above the 98% level.
2009	Customer Satisfaction	% increase of satisfied customers	0% increase of satisfied customers. Survey results are available for planning changes and establishing new % satisfaction goal.	% of satisfied customers will increase by 10%

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2009	Efficiency	% of business transactions done electronically	80% of business transactions done electronically	90% of business transactions done electronically
2009	Data Storage	% of Institutes replacing paper folders	At least 10% of Institutes replace paper folders with electronic grants folder. (Projected)	33% of the Institutes now use the electronic grant folder for traditional file room storage of documents and correspondence.

2.1.11 NIH OD NIH Business System (NBS)

The NBS Project will replace the NIH administrative and financial core operations systems and is a component of the department-wide effort of the Health and Human Services Unified Financial Management System (UFMS). The NIH/NBS, a phased deployment, deployed the general ledger module and travel manager system as targeted. The HHS implementation of UFMS proceeded in parallel to NIH's implementation of NBS. As the two systems rely on much of the same underlying COTS package, HHS is working with NIH to migrate some components of NBS to UFMS and to leverage some additional component services within the UFMS program. NBS is an operational system, although the investment includes some continued development and enhancement activities. NBS is incorporated in the interim transitional phases of UFMS, while the target vision for UFMS will leverage the technical capabilities of both solutions and eliminate redundancies between NIH and HHS instances.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Efficiency	Number of NBS Help Desk tickets (per module).	FY 2006 actual results	TBD based on PY results
2007	Productivity	Percent of total NBS tickets closed by Level 3 personnel	FY 2006 actual results	TBD based on PY results
2007	Reporting and Information	Number of purchase orders approved	FY 2006 actual results	TBD based on PY results
2007	Access	Days to close books	FY 2006 actual results	TBD based on PY results
2007	Availability	Percent of server uptime	FY 2006 actual results	99.8% or higher
2008	Efficiency	Number of NBS Help Desk tickets (per module).	FY 2007 actual results	TBD based on PY results

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2008	Productivity	Percent of total NBS tickets closed by Level 3 personnel	FY 2007 actual results	TBD based on PY results
2008	Reporting and Information	Number of purchase orders approved	FY 2007 actual results	TBD based on PY results
2008	Access	Days to close books	FY 2007 actual results	TBD based on PY results
2008	Availability	Percent of server uptime	FY 2007 actual results	99.8% or higher
2009	Efficiency	Number of NBS Help Desk tickets (per module).	FY 2008 actual results	TBD based on PY results
2009	Productivity	Percent of total NBS tickets closed by Level 3 personnel	FY 2008 actual results	TBD based on PY results
2009	Reporting and Information	Number of purchase orders approved	FY 2008 actual results	TBD based on PY results
2009	Access	Days to close books	FY 2008 actual results	TBD based on PY results
2009	Availability	Percent of server uptime	FY 2008 actual results	99.8% or higher

2.1.12 PSC E-Gov Travel

E-Gov Travel was one of the initial 24 E-Government initiatives on the President's Management Agenda, and is now incorporated as E-Travel among the mandatory initiatives in the Federal Transition Framework. The investment will fund an outsourced travel management service operated as a Web-based, vendor-hosted system, which means that the only HHS technology required to use the system is a web browser and internet connectivity. HHS began planning for E-Gov Travel in early 2004, and subsequently selected Northrop Grumman's GovTrip – one of three services made available through the General Services Administration under the E-Gov Travel initiative. E-Travel is operational at HHS, and is planned for complete rollout across the Department and all Operating Divisions by the end of FY2007.

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
2007	Travel	Travel	Number of OPDIV Implemented	Achieve or exceed 11 OPDIVs implemented
2007	Response Time	Response Time	Percentage of Helpdesk Calls in	Achieve or exceed 85% calls

Fiscal Year	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements
			30 sec	answered in 30 sec
2007	Efficiency	Productivity	Number of Vouchers Processed	Achieve or exceed quarterly OMB voucher targets
2007	Data Reliability and Quality	Data Standardization	Number of OPDIV Implemented	Achieve or exceed 11 OPDIVs implemented

2.2 Transition Priorities

This section describes current and planned activities corresponding to several ongoing initiatives at HHS. The table below summarizes the current status of each initiative and highlights major progress milestones for 2008.

Table 1: Transition Planning for HHS Initiatives

Initiative	Current Status	Milestones		
		2007	2008	2009
Telemedicine	New	Define initiative	Propose investment	Initiate
Performance Measurement Tool	Defined performance management framework by HHS Segment	Specify requirements and design solution	Develop and implement solution	Standardize performance measurement and monitoring
Business Intelligence Solution	Developed functional requirements and business case for proposed investment	Submit business case and secure funding; design solution and select vendor(s)	Implement solution	Expand data sources, scope, and use of reporting and analytics capabilities
HHSIdentity	Funding approved; in planning and requirements phase	Define requirements and design solution; conduct market analysis and vendor selection	Develop and implement solution	Leverage HHSIdentity to support other security and system initiatives
HSPD-12	Established ability to issue ID cards; selected ID card vendor; HHS offering ID card issuance services	Evaluate service and technology reuse potential for logical access and information security requirements	Issue FIPS 201 compliant ID cards to employees and contractors	Maintain operational capability

Initiative	Current Status	Milestones		
		2007	2008	2009
Data Architecture Work Group (DAWG) (part of HHS EA scope)	Data artifact standards developed; initiated enterprise data management plan	Execute prioritized initial data management activities	Implement data governance and stewardship; harmonize segment data models	Implement enterprise data models
Enterprise SOA	No centralized initiative; SOA analysis proposed	Secure funding for SOA analysis; initiate analysis	Develop recommendations for enterprise SOA; conduct market analysis and vendor selection	Implement SOA infrastructure and corresponding functional and technical processes

2.2.1 Mission-oriented Segments

From a Departmental perspective, the transition priorities for the OPDIV and HHS programs responsible for mission execution are reflected in the individual Segment Transition Plans for each of the nine HHS Segments, and in the HHS IT investment portfolio. The high-priority investments are summarized in section 2.1, above. The complete list of HHS major and tactical IT investments, showing the anticipated investment timeline and sorted by HHS Segment, appears in Appendix A.

One new initiative raised in the context of the HHS IRM strategic planning workshops is a distributed infrastructure and service model for the remote provision of medical advice and care. This concept is known as “telehealth” or “telemedicine.”

In recent years, health care has migrated to a more proactive, preventative care delivery model compared with the reactive, episodic care delivery model utilized before. At the same time, the number of older people in the U.S. population has grown at a very rapid pace. Older age is accompanied by increased risk of certain diseases and disorders. Chronic diseases (e.g., arthritis, hypertension, heart disease, cancer, diabetes, stroke, etc.), memory impairment, and depressive symptoms affect a significant number of older people. Additionally, people with chronic medical conditions, medically underserved locations (i.e., rural and remote areas, including American Indian tribal areas), and disabled populations in urban areas have also increased. All these trends will continue generating a sustained demand for health care services.

Recent advances in technologies (e.g., broadband, wireless, physiological sensors, and electronic health records) offer an unprecedented opportunity to increase access to health care services and improve health care delivery using telemedicine. HHS has been a strong supporter of telemedicine in the past decade. Through its OPDIVs including HRSA, CMS, AHRQ, and IHS, HHS has provided substantial grants and funding to develop and establish telemedicine services to improve access to health care services and health care delivery in rural, remote, isolated, and urban communities across the nation. In a current report, “Evaluation Design of the Business Case of Health Technology in Long-Term Care (July 13, 2006)”, HHS identified telemedicine as

one of the eight health IT applications, tools, and functionalities that are relevant in nursing home and home health care environments.

Strategic planning workshop participants recommended that telemedicine should be considered as a major HHS IRM initiative with a focus for the next several years on developing the infrastructure to support telemedicine. Current telemedicine efforts are primarily focused on delivering health care services and each individual service provider usually has its own IT environment. Sharing telemedicine IT resources and infrastructure among these providers is very limited. One proposal is that HHS should collaborate with internal and external stakeholders to build a national telemedicine infrastructure with regional service centers to coordinate, manage, and maintain such an infrastructure. Such a national IT infrastructure would enable health care providers to establish and deliver telemedicine services much faster, more uniformly and cost-effectively, and facilitate collaboration among telemedicine services providers to improve the continuum and quality of services.

2.2.2 Information Resources Management

During the nine HHS Segment strategic planning workshops, participants identified IRM issues and requirements considered critical to their respective segments. The common themes of these requirements are shown in the following table.

Table 2: Common IRM Themes Across Segments

Common IRM Themes
Data/information dissemination
Data quality (i.e., accuracy, authoritativeness, completeness, integration)
Provision of impact analyses (e.g. baseline analysis, trend analysis, etc.)
Disparities in HHS security controls and standards
Non-alignment of OPDIV and Segment goals and objectives
Questionable or inconsistent Segment performance measurement indicators
Data standardization/harmonization
Data modeling and meta-data standards
Decision support capabilities
Data sharing/collaboration
Adoption and coordination of service-oriented architecture (SOA)
Web portal (for education, training, single source of information, facilitating business processes)
Telemedicine and distributed enabling infrastructure
Use of best practices (e.g., ITIL) for information management
Use of software development best practices (e.g. CMMI)
Business intelligence capabilities (e.g., data mining)

These themes can in turn be grouped into 8 actionable areas of need:

1. Improved data quality, data authoritative source, and data standardization. The general consensus was that the EA segment structure and segment mapping would be useful in establishing data management priorities.
2. Improved decision support including business intelligence, impact analysis, and segment collaborative analysis should be investigated and developed.
3. Security should be more flexible to actual needs and existing and required roles.
4. Performance measures and HHS alignment to strategic goals and objectives and HHS segment boundaries need to be improved.
5. Department should provide strategies, guidance, and standards for implementing a SOA.
6. Information dissemination (portals especially) should be improved and coordinated across the Department.
7. A specific need for developing telemedicine was brought up by Indian Health Service (IHS), but it was agreed that for other areas with difficult access (e.g., rural area) this would be an important initiative.
8. Best practices should be identified and sponsored department-wide. Information Technology Infrastructure Library (ITIL) and Capability Maturity Model Integration (CMMI) for IRM management and software development were mentioned specifically.

Based on the IRM mission, vision, goals and objectives, and the identified common IRM themes across segments, the following IRM priority areas have been identified. It is understood that these prioritized areas could change due to changes in HHS mission and vision, priorities, or emerging situations. This list of IRM priorities will be validated and updated in the next iteration of the Transition Plan.

- E-Gov Initiatives
- Federated SOA infrastructure
- Federal Transition Framework initiatives
- HHS Enterprise Architecture
- Health Information Technology
- IRM consolidation and shared infrastructure
- IRM infrastructure and common services to support public health emergencies (e.g., Avian Flu pandemic, natural and man-made disasters)
- IRM investment performance management – HHS Performance Architecture
- IRM security and privacy provisions
- Technology strategies, and the adoption and insertion of key technologies and standards based on HHS IRM priorities and directions

2.2.3 Business Intelligence and Reporting

This year HHS began an initiative to specify and provide consistent enterprise data aggregation, reporting, and analytics across multiple systems supporting programs within the Office of the Chief Information Officer. The selection and implementation of a Business Intelligence solution will maximize the investments made in the current systems by providing an integrated view of enterprise data with the goal of providing consistent, up-to-date and reliable data to end users to enable effective business decision-making support. BI solution offerings provide a way to automate consolidation, analysis, presentation, reporting, and compliance capabilities necessary to make enterprise data available for action and insight. This will improve data and information access and delivery as well as reporting and analysis capabilities at HHS. The current reporting environment across these various systems is inefficient and does not adequately address the overall reporting needs of the organization. This limits the range of data available for strategic planning and operational decision-making.

The long range direction and strategic objective of this initiative is to facilitate access to data and information to inform decisions. This project aligns with many goals established in the President's Management Agenda as well as the HHS Enterprise IRM Strategic Plan. The major milestones planned for this initiative include:

- Submission and approval of the business case to support investment in the BI solution;
- Conversion of the functional and technical requirements already gathering into a form that can support a request for information or request for proposal solicitation to vendors;
- Complete analysis of alternatives and market analysis to determine the most effective solution for HHS;
- Procurement, implementation, and deployment of the BI solution and its integration with existing information systems.

2.2.4 Performance Measurement and Management

In the past year, HHS initiated the development of an enterprise performance management approach and the tools to support consistent performance measurement and performance-based management of investments and initiatives across HHS. The HHS performance architecture is the instantiation of the performance management framework within the HHS EA Repository. Individual initiatives and projects – independently or in the context of an EA segment – will determine appropriate performance measures following the guidance provided in the performance management framework, and will select performance indicators and target metrics that, if met, will effectively demonstrate success. The performance indicators selected for each program or project will be populated in the HHS EA Repository and aligned to the HHS performance management framework, and by extension to the FEA Performance Reference Model (PRM), allowing HHS to identify and report on which activities across the department are intended to support specific goals and objectives, such as those in the HHS Strategic Plan, cross-agency initiatives, and the President's Management Agenda.

While the HHS EA Repository is an appropriate mechanism for capturing performance measures, it is not an optimal solution for recording individual metrics or performance measurement indicator observed values over time. HHS envisions deploying a streamlined

performance measurement tool for the purpose of capturing measurement values over time, and facilitating performance monitoring and reporting of progress against measurement targets. One possible solution would be to leverage the toolset for the Business Intelligence solution. Major milestones for performance management at HHS include specification of functional and technical requirements for a performance measurement and reporting tool and, in parallel, formalizing performance measurement indicator requirements and guidance for HHS investment and initiatives, to improve the quality and consistency of the measurement indicators chosen.

2.2.5 Security

Data security and privacy protection are high priorities for HHS and all government agencies. The Department's strategy for improving protection of data assets addresses recently issued OMB mandates for encrypting data on laptops, as well as increasing the availability of encryption technology for use in protecting appropriate types of data across HHS. The Secure One HHS program evaluated, selected, and implemented a full-disk encryption solution for laptop computers, and emphasized a commitment to future interoperability with smart cards to be implemented as part of the Department's HSPD-12 program.

Department-level initiatives under Secure One HHS will seek to leverage externally mandated government security initiatives and requirements to enable more consistent and effective security controls across HHS. For example, as part of the OMB-mandated transition to Internet Protocol version 6 (IPv6) within government IRM infrastructure, the IP Security (IPSec) capability of the IPv6 protocol will become available for use to promote data confidentiality and integrity. The detailed network infrastructure analysis required to comply with IPv6 implementation milestones has provided information to HHS that will support improvements in network security. For example, integrity and confidentiality of data will be supported by instituting node authentication – possibly using network access control (NAC) – and greater degrees of internal network segmentation to effectively restrict access except to known devices. Starting with devices handling high sensitivity data as well as all servers, node authentication will ultimately be instituted throughout the remainder of the network. In addition, many of the technical measures to be implemented to support physical security and personal identity verification in compliance with HSPD-12 and FIPS 201 offer the potential for use to support better logical access and other information security measures. Core supporting services for HSPD-12, such as a public key infrastructure (PKI) enable strong authentication, digital signatures, and standardized identity management, authentication and authorization services. Successful management of these encryption capabilities will entail the development of policies and mechanisms for cryptographic key management and key recovery.

The HHSIdentity initiative, managed under the Office of the Chief Technology Officer, will integrate and implement key identity management and E-Authentication services across the Department in compliance with HSPD-12 and FIPS 201. These common security, identification, and authentication services will be integrated across the enterprise in support of enterprise initiatives such as Enterprise e-Mail, and will be leveraged by a variety of HHS systems and applications for authentication. This initiative will include the integration and implementation of key identified services including single sign-on, enterprise directory services, public key infrastructure, and, potentially, biometrics services to meet defined operational objectives and functional requirements. Another part of the strategy will be to leverage a Federated SOA

approach in the delivery of these services, consistent with our Shared Services and IRM consolidation strategy described above.

Some of the specific areas to be addressed in meeting HSPD-12 requirements include use of smartcard technology to store digital certificates and enable strong authentication consistent with security control baseline requirements for high-sensitivity systems and government-wide guidance such as OMB Memorandum 06-16. The scope of the HHSIdentity initiative includes proofing of user identity in accordance with federal guidelines, centralized user provisioning, and technical implementation of secure encryption keys and digital signatures within a public key infrastructure (PKI). Appropriate policy will be developed to govern the implementation and use of these security technologies. Other policy and possible identification of additional technologies will be required for external personnel and others who will not be issued smart cards.

2.2.6 Enterprise Data Management

During the past year, HHS chartered and convened a Data Architecture Work Group (DAWG) under the Enterprise Architecture Review Board. The DAWG members represent the data architecture interests of all HHS Operating Divisions and the Department. Among the tasks assigned to the DAWG are the development and implementation of plans, processes, and activities to establish an enterprise data management program at HHS.

Major accomplishments to date include an analysis of the requirements stemming from the FEA Data and Information Reference Model version 2.0, including a determination of the most appropriate representation of data entities and relationships. The group has also created a list of activities to be undertaken, including creation and formalization of data governance strategies for HHS, including data stewardship policies, procedures, roles, and responsibilities; development of policies and capabilities for enterprise data management, including data harmonization and normalization; enhancement of data quality; and specification of data protection standards covering both data privacy and information security.

2.2.7 Enterprise Performance Life Cycle

The HHS Office of Enterprise Architecture led the development of an investment-based life cycle defining 10 common phases from initiation through disposition. The Enterprise Performance Life Cycle integrates data collection and information reporting requirements across Capital Planning and Investment Control, Enterprise Architecture, Information Security, and Project Management functions. It defines exit criteria and a stage gate review process at the end of each phase of the life cycle to provide a framework in which individual projects supporting IT investments can be monitored and managed in a more consistent manner. Following the initial development of the EPLC, the implementation and oversight of the processes became the responsibility of the HHS CPIC Program.

During the past year, the HHS CPIC Program convened several information sessions and workshops related to the EPLC, to bring together representatives from the Department and the OPDIVs with responsibility for investment life cycle and IT portfolio management. Based on input, review, and feedback from these meetings, the EPLC has been revised and updated to reflect a true enterprise-wide perspective.

The next major milestone for the EPLC is formal implementation of the processes, including establishing appropriate governance and issuing policy statements directing its intended use. HHS intends to add standard language to IT contracts requiring adherence to and compliance with the process and information requirements specified in the EPLC.

2.2.8 Service-Oriented Architecture

SOA initiatives are leading a revolution in enterprise business and IRM integration. Many companies and government agencies are moving toward SOA projects, from limited scale efforts, to large strategic SOA rollouts at the enterprise level with supports from senior management in IRM and sometimes business executives. SOA as an IRM strategy has gained traction in the past year. SOA enables a business service layer on top of applications, which facilitates emphasis on business function support rather than hardware and software.

The core business value of SOA is in delivering business agility. Industry best practices have demonstrated that the business benefit of SOA is in service reconfiguration flexibility, with changes done in days by business people, not in weeks by technical specialists. This means that the business and technical architectures must be aligned, which is not the case in most organizations today. Expressing existing application architecture in SOA terms is not enough. Services must be business-oriented if they are to be orchestrated by business people. SOA helps to streamline IRM infrastructure, and helps to align IRM investments with business goals, optimizing IRM investments. The deployment of SOA in web service allows integration of business with current technologies.

SOA can be evolved based on existing systems and infrastructure rather than requiring a full-scale re-build. Organizations will achieve benefits from SOA by focusing their development effort around the creation of services with using both new and existing components and technologies, combined with the component-based approach to software engineering and the enabling SOA infrastructure. The benefits of SOA include:

- Business agility: SOA facilitates business process improvement. It provides business users with an ideal environment for monitoring business operations. Process modeling is reflected in the business services. Process manipulation and the change of process flow can be achieved by the use of BPM (Business Process Modeling) tools integrated into the SOA infrastructure.
- Reuse and leverage existing assets: A business service can be constructed as an aggregation of existing components, using a suitable SOA infrastructure and made available to the enterprise. Legacy systems can be encapsulated and accessed via web service interfaces.
- Common infrastructure as commodity: SOA infrastructure is becoming a commodity that can be implemented by the use of commercial-off-the shelf (COTS) products. By enforcing standards, its development and deployment can be consistent across an enterprise. Existing components, newly-developed components, and components purchased from vendors can be consolidated within a well-defined SOA infrastructure.
- Reduced development cost: The reuse of existing service and components will reduce software development time and cost.

Beyond SOA, and to align with the HHS enterprise structure, HHS will explore a Federated SOA solution, and this Federated SOA approach will be tightly integrated with, and a subset of the HHS Enterprise Architecture. In combination, this approach can be viewed as an HHS Federated, Service Oriented Enterprise Architecture (SOEA). HHS will leverage SOA technologies for delivery of common services across the Department to support both enterprise IRM initiatives as well as mission oriented IRM investment (systems and applications) across the Department.

2.2.9 Internet Protocol Version 6 (IPv6) Implementation

In August of 2005, the Office of Management Budget (OMB) issued Memorandum 05-22 establishing the goal of transitioning all Federal government agency network backbones to support the next generation of the Internet Protocol Version 6 (IPv6) by June 30, 2008. Internet Protocol (IP) is the "language" and set of rules computers use to communicate over the Internet. The existing protocol supporting the Internet today – Internet Protocol Version 4 (IPv4) – provides the world with approximately 4 billion IP addresses, inherently limiting the number of devices that can be given a unique, globally routable address on the Internet. The emergence of IPv6, providing the world with a much greater number of available IP addresses and enhanced mobility features, is essential to the continued growth of the Internet and development of new applications leveraging mobile Internet connectivity. Although the IT community has come up with workarounds for this shortage in the IPv4 environment, IPv6 is the true long-term solution.

Agencies must prepare for the future of networking and Internet technology by transitioning their networks to support IPv6 addresses and data packets. The June 30, 2008 milestone, as required by OMB, applies only to making network backbones IPv6-capable. IPv6 does not actually have to be enabled (i.e., in an operational state) by June 30, 2008. However, network backbones must be capable of passing IPv6 traffic and supporting IPv6 addresses.

The IPv6 initiative at HHS follows the standard phases prescribed in the HHS Enterprise Performance Life Cycle (EPLC), including development of relevant EPLC artifacts delivered at the end of each phase. HHS maintains a distinct IPv6 Transition Plan, which lists historical progress and achievements against mandated IPv6 implementation milestones, major IPv6 initiative deliverables, and incremental performance milestones leading up to the June 30, 2008 completion deadline. The remaining IPv6 milestones are summarized below.

Table 3: IPv6 Milestones from IPv6 Transition Plan

Milestone Date	Activity	Artifacts
March 30, 2007	Demonstrate Readiness	Documented Current Network Infrastructure, Topology and impacted service providers; Identify any applications that will need to run over the Core IPv6 network; Identify IPv6 Address requirements
Apr. 30, 2007	IPv6 Address request	Submit IPv6 Address request to ARIN
May 31, 2007	Submit Design for IPv6 Core	Develop IPv6 Core architecture
June 29, 2007	Validate transition scenario	Validated core design

Milestone Date	Activity	Artifacts
July 31, 2007	Develop a test plan for IPv6 compatibility / interoperability	Test plan
	Validate Service provider tansitions	Obtain validation from service providers of IPv6 compatibility
	Develop IPv6 Addressing Plan	Develop HHS wide schema for IPv6 addressing
	Procure Test equipment	Procurement equipment required to set up a test environment.
Aug. 31, 2007	Implement Test environment	Setup of Test equipment
Sept. 28, 2007	Develop Implementation, Security and Network Management Plan	Implementation Plan; Security Plan; Network Management Plan
Nov. 30, 2007	Equipment Upgrades\Replacement	Complete any upgrades\replacements required to implement IPv6 functionality
Jan 31, 2008	Complete validation of plans against Test environment	Results report of pilot testing
Feb. 29, 2008	Begin implementation of IPv6	Based on pilot results
June 30, 2008	Complete network backbone transition to IPv6	EPLC artifacts documenting the updated network infrastructure;Testing results submitted

2.3 Cross-agency Initiatives

All relevant government-wide and health sector initiatives are incorporated in the HHS enterprise architecture, to provide a centralized initiative alignment capability, to identify opportunities for reuse of internally and externally available services, and to help demonstrate compliance with mandatory guidance, regulations, and technical standards.

2.3.1 Federal Transition Framework

The recently released FTF Catalog lists 18 mandatory initiatives, each of which is applicable in some capacity to HHS. The table below summarizes the HHS transition planning perspective for each FTF initiative, characterizing the level of relevance, current status, and expected progress or milestones for 2008. As additional detail in support of FTF alignment, a listing of IT investments within the HHS IT portfolio aligned to each of the FTF initiatives appears in Appendix B.

Table 4: Transition Planning for FTF Initiatives

Initiative	HHS Relevance	Current Status	Planned Activities
Budget Formulation and Execution Line of Business	Potential Service Consumer	No enterprise initiative	Evaluate potential for reuse of FTF services as they are developed
Case Management Line of Business	Litigation and Regulatory Enforcement	No enterprise initiative	Evaluate potential use of FTF defined processes and services

Initiative	HHS Relevance	Current Status	Planned Activities
Disaster Management	Mission Responsibility under Asst. Secretary for Preparedness and Response	Integrating NDMS and OASPR	Align emergency preparedness and response processes with FTF; contribute to disaster management shared services
E-Authentication	Government-wide mandate	Evaluating within context of HHS PKI, HHSIdentity and HSPD-12 initiatives; implementing E-Authentication in grants.gov	Incorporate E-Authentication functional and technical requirements and standards in HHS solution architectures
E-Travel	Service Consumer	Implemented GovTrip	Complete HHS-wide deployment
Federal Health Architecture (FHA)	Managing Partner	All FHA work products incorporated in HHS EA, including CHI and Food Safety	Establish architecture foundation for major ONC initiatives including NHIN, EHR interoperability, and security and privacy
Financial Management Line of Business	Intent to be a Service Provider (SSP)	Deployed UFMS to all OPDIVs except CMS and NIH; HHS offering financial management services to external agencies	Migrate NIH NBS into UFMS; align UFMS processes and services to FMLOB
Geospatial Line of Business	Potential Service Consumer or Provider	Evaluating OPDIV-specific GIS systems and services for use within HHS	Integrate HHS GIS Public Health data to Geospatial One-Stop
Geospatial One-Stop	Government-wide mandate	CDC and HRSA leading Health and Human Disease geodata.gov community	Integrate HHS GIS Public Health data to Geospatial One-Stop
Grants Management Line of Business	Co-Managing Partner; Intent to be a Service Provider (SSP)	ACF and NIH provide grants systems and services to external agencies; ACF's is part of the FTF	Increase internal and external use of HHS target grants management services
Grants.gov	Managing Partner	HHS grant opportunities are currently published on grants.gov; HHS developed guidance and interface specifications	Maintain 100% posting of HHS discretionary grants on grants.gov

Initiative	HHS Relevance	Current Status	Planned Activities
HSPD-12	Government-wide mandate	Established ability to issue ID cards; selected ID card vendor; HHS offering ID card issuance services	Issue cards to employees and contractors; Evaluate service and technology reuse potential for logical access and information security requirements
Human Resources Line of Business	Intent to be a Service Provider (SSP)	HHS offering human resources services to external agencies	Increase internal and external use of HHS target human resources management services
Information Sharing Environment (ISE)	Member of Information Sharing Council	Evaluating information to be provided to ISE	Evaluate ISE processes, services, and data requirements as they are developed
Information Systems Security (ISS) Line of Business	Potential Service Consumer	HHS offering background investigation, ID card issuance, security assessment and consultation services	Evaluate ISE common processes and additional services as they are developed
Integrated Acquisition Environment (IAE)	Government-wide mandate	Planning HHS Consolidated Acquisition System (HCAS) deployment; HHS offers set of Strategic Acquisition Services to internal and external agencies	Deployment of HCAS; increase internal and external use of Strategic Acquisition Services
Internet Protocol Version 6 (IPv6)	Government-wide mandate	Meeting OMB milestones	Follow IPv6 transition plan (see section 2.2.9)
IT Infrastructure Optimization Line of Business	Government-wide mandate	Multiple HHS initiatives underway for data center consolidation, common network and help desk services, and leverage of government telecommunications contract vehicles.	Align HHS to IOI specified business processes; Evaluate IOI services as they are developed

2.3.2 Health Information Technology

HHS has incorporated all technical standards adopted within the Health IT sector, including those approved through the Health Information Technology Standards Panel (HITSP) and the Consolidated Health Informatics (CHI) initiative under the Federal Health Architecture. All of

the individual technical standards specified by these initiatives are reflected in the HHS enterprise architecture and reported in consolidated form in the current version of the HHS Technical Standards Profile.

For Health IT standards, the major transitional activity focuses on implementing the standards that have been approved to date. HHS has designed and implemented the technical capability to associate Health IT standards with relevant data, systems, and processes across HHS. The next major milestone for these activities is to more fully capture the applicability of Health IT standards for HHS data, systems, and processes, and to provide reporting mechanisms that demonstrate accurate alignment to Health IT standards and, therefore, compliance with policies and mandates regarding the adoption of these standards.

3 Transition Planning Milestones

The purpose of this section is to establish milestones related to significant individual initiatives or investments listed in this Transition Plan, to provide a basis for assessing transition progress against those milestones on an annual basis.

3.1 Review of 2006 Milestones

The previously developed HHS Transition Strategy, released in February 2006, did not formally specify performance targets for the initiatives and investments addressed in the document. In terms of transition milestones, the 2006 Transition Strategy noted the planned annual status of major information systems planned for deployment in support of eight initiatives in the Management of Government Resources segment. It included similar annual status projections for three line-of-business initiatives, as well as one Health IT initiative and one E-Gov initiative. This format does not provide a suitable basis for assessing achievement of performance-based milestones, but does allow a comparison of actual progress versus anticipated progress in the implementation and roll-out of systems and initiatives addressed in the 2006 plan.

Table 5: Planned vs. Actual Initiative Status for 2007

Functional Area	Initiative	Planned Status	Actual Status
Core Accounting	Unified Financial Management System (UFMS)	Deployed to all OPDIVs except NIH, CMS	Deployed to all OPDIVs except NIH, CMS
	NIH Business System (NBS)	ADB, CAS, NBS, some components of UFMS	NBS, some components of UFMS
	CMS Healthcare Integrated General Ledger System (HIGLAS)	HIGLAS, some components of UFMS	HIGLAS, some components of UFMS
Travel Management	HHS e-Travel (GovTrip)	Deployed to and used by all OPDIVs	Deployed to all OPDIVs; NIH still to complete transition to using GovTrip
Property and Asset Management	Property Management Information System (PMIS) (Sunflower)	Deployed to all OPDIVs	Deployed to all OPDIVs
	NIH Business System	NBS	NBS
Supply Management	Supply and Warehousing	Multiple initiatives	Multiple initiatives
Acquisition Management	CDC Integrated Contracts Expert (ICE)	ICE	ICE
	HHS Consolidated Acquisition System (HCAS)	Multiple instances of Purchase Request Information System (PRISM)	Multiple instances of PRISM
	NIH Business System	NBS	NBS

Functional Area	Initiative	Planned Status	Actual Status
Payment Management	HHS Payment Management System (PMS)	PMS Deployed	PMS Deployed
Human Resources Management	HHS Accounting for Pay System (AFPS)	AFPS Deployed	AFPS Deployed
	HHS Integrated Time and Attendance System (ITAS)	ITAS Deployed	ITAS Deployed
	Commissioned Officers Personnel and Payroll System (COPPS)	COPPS Deployed	COPPS Deployed
	HHS Enterprise Human Resources and Payroll (EHRP)	EHRP Deployed as part of EHRIS	EHRP Deployed as part of EHRIS
	HHS Enterprise Performance Management (EPM)	EPM Deployed as part of EHRIS	EPM Deployed as part of EHRIS
	HHS QuickHire/QuickClass (QH/QC)	QH/QC Deployed as part of EHRIS	QH/QC Deployed as part of EHRIS
	Learning Portal (LP)	LP Deployed as part of EHRIS	LP Deployed as part of EHRIS
Grants Management	Enterprise Grants Management System (EGMS)	Electronic Research Administration (eRA) and Grants Administration, Tracking and Evaluation (GATES)	Electronic Research Administration (eRA) and Grants Administration, Tracking and Evaluation (GATES)
Financial Management Line of Business	Financial Management LOB Center of Excellence	External customers	No external customers
Grants Management Line of Business	Grants Management LOB Center of Excellence	External customers	Services available to external customers
Human Resources Line of Business	Human Resources LOB Center of Excellence	External customers	Services available to external customers
Consolidated Health Informatics	CHI Standards Adoption	CHI standards implementation	CHI incorporated in technical standards
IPv6	IPv6 Planning and Deployment	IPv6 implementation	Migration planning meets OMB milestones

3.2 Summary of 2007 Milestones

As described in the previous sections of this document, the HHS Transition Plan includes short and medium-term planning milestones covering the fiscal years 2007-2009. This section summarizes the implementation milestones for transitional activities and initiatives in 2007, which will provide the basis for evaluation of progress against this year's milestones in the next iteration of the Transition Plan.

Table 6: Transitional Milestones for 2007

Driver	Initiative	Milestones for 2007
IT Portfolio	CDC PHIN: BioSense	Increase number of sources and volume of data, as well as access to data, according to target metrics specified in Exhibit 300
	CMS Beneficiary Enrollment and Plan Payment	Increase performance according to target metrics specified in Exhibit 300
	CMS Drug Claims (DDPS)	Increase performance according to target metrics specified in Exhibit 300
	CMS Healthcare Integrated General Ledger Accounting System (HIGLAS)	Increase performance according to target metrics specified in Exhibit 300
	Federal Health Architecture – Managing Partner	Populate FTF catalog elements for the FHA initiative to reflect full scope of FHA activities and work products
	Grants.gov – Find and Apply	Increase performance according to target metrics specified in Exhibit 300
	HHS Human Resources LOB IT	Increase performance according to target metrics specified in Exhibit 300
	HHS Unified Financial Management System	Develop plan to migrate NIH to UFMS
	HIS Resource and Patient Management System (RPMS)	Increase performance according to target metrics specified in Exhibit 300
	NIH Electronic Research Administration (eRA)	Increase performance according to target metrics specified in Exhibit 300
	NIH Business System (NBS)	Develop strategy to incorporate NBS within UFMS
	PSC E-Gov Travel	Complete migration of all HHS OPDIVs to exclusive use of GovTrip e-Travel service
Federal Transition Framework	Budget Formulation and Execution Line of Business	Evaluate FTF initiative elements as they are developed to determine potential for use by HHS
	Case Management Line of Business	Evaluate FTF initiative elements as they are developed to determine potential for use by HHS
	Disaster Management	Align HHS emergency preparedness and response processes, systems, data, and services with FTF initiative elements
	E-Authentication	Integrate E-Authentication services for grants.gov authentication; develop plan for enabling web-based HHS applications to use E-Authentication services
	E-Travel	Complete migration of all HHS OPDIVs to exclusive use of GovTrip service

Driver	Initiative	Milestones for 2007
	Federal Health Architecture (FHA)	Populate FTF catalog elements for the FHA initiative to reflect full scope of FHA activities and work products
	Financial Management Line of Business	Align UFMS processes and services to FTF initiative elements; expand use of HHS-offered financial management services to external agencies
	Geospatial Line of Business	Integrate HHS-maintained GIS Public Health data to Geospatial One-Stop
	Geospatial One-Stop	Integrate HHS-maintained GIS Public Health data to Geospatial One-Stop
	Grants Management Line of Business	Align ACF GATES processes to FTF initiative elements; increase internal and external use of HHS grants management services
	Grants.gov	Achieve 100% target for posting discretionary HHS grants to grants.gov
	HSPD-12	Issue FIPS 201 compliant ID cards to employees and contractors
	Human Resources Line of Business	Align EHRP processes and services to FTF initiative elements; expand use of HHS-offered HR services to external agencies
	Information Sharing Environment (ISE)	Evaluate FTF initiative elements as they are finalized to determine potential for use by HHS; contribute health alert and emergency preparedness and response data to ISE
	Information Systems Security (ISS) Line of Business	Develop plan for incorporating security services provided by another agency
	Integrated Acquisition Environment (IAE)	Evaluate FTF initiative elements as they are developed to determine potential for use by HHS; deploy HHS Consolidated Acquisition System
	Internet Protocol Version 6 (IPv6)	Continue implementation and migration activities according to mandated timeline; complete acquisition of IP addresses
	IT Infrastructure Optimization Line of Business	Evaluate FTF initiative elements as they are developed; align ITSC processes and services to FTF initiative
Health Information Technology	Consolidated Health Informatics (CHI)	Implement CHI standards for relevant information and systems; demonstrate compliance with standards
	Health IT Standards Panel (HITSP)	Implement approved HITSP standards for appropriate uses within HHS; demonstrate compliance with standards

Driver	Initiative	Milestones for 2007
Strategic Planning Process	Telemedicine	Define initiative in preparation for formal proposal
	Performance Measurement Tool	Specify requirements and design solution
	Business Intelligence Solution	Submit business case and secure funding; design solution and select vendor(s)
	HHSIdentity	Define requirements and design solution; conduct market analysis and vendor selection
	Enterprise Data Management	Establish plan for Data Architecture Work Group to execute prioritized initial data management activities
	Enterprise Service-Oriented Architecture	Secure funding for SOA analysis; conduct analysis

4 HHS Enterprise Architecture Transition

The HHS Enterprise Architecture Program established its own structured hierarchy of goals and objectives, to help prioritize and sequence program activities and establish a baseline for more consistent performance measurement and management of the program. The consolidated set of HHS EA goals and objectives for 2007 is provided in Appendix C. This section highlights the major program activities undertaken to further progress toward achievement of each of the goals.

4.1 Strengthen the EA Program Foundation

Major activities in support of this goal include:

- Developing and implementing a common performance management framework, specifying required and recommended performance measures within each HHS Segment.
- Re-establishing communication and outreach activities, including a revised program Communication Plan and an EA "road show" for the Operating Divisions.
- Improving the utility of the EA with common services, presentation views, reports, integration, and other tools.

4.2 Evolve the Enterprise Architecture to Higher Levels Of Completion

Major activities and accomplishments in support of this goal include:

- Instituted minimum standards for information to be provided related to every prioritized investment in the HHS IT portfolio.
- Developed and implemented a common segment architecture development methodology to both facilitate consistency in segment-based work and improve the level of EA detail.
- Formalizing the processes for updating the baseline and target architectures, including revisions to enterprise service and technical standards.
- Establishing the EA Repository as the authoritative source of investment EA data, business process models, and IT systems.

4.3 Further Integrate EA into HHS Planning and Decision-Making

Major activities in support of this goal include:

- Developed and instantiated a segment-based strategic planning process, soliciting subject matter expertise from IT and business representatives.
- Aligning and integrating EA across the enterprise performance life cycle processes (e.g., EA, CPIC, security, program and project management).
- Improving the business alignment of the enterprise architecture, including support for the program-based perspective used for HHS Strategic Plan development.
- Gathering requirements and creating a business case for an integrated business intelligence tool to support reporting and analytic needs of HHS programs.

4.4 Leverage the EA to Improve Business Outcomes

Major activities in support of this goal include:

- Shifting strategic planning emphasis from business-IT alignment to an integrated strategic planning perspective that reflects both business and IT.
- Identify opportunities for cost savings or cost avoidance due to EA information and analysis, particularly including data sharing and service reuse.
- Using the performance management framework instantiated in the EA Repository to link investments in systems and business processes to performance measures, outcomes, objectives, and goals.
- Establishing the EA as the point of alignment and transition planning for HHS participation in and implementation of cross-agency initiatives such as the FTF.

Appendix A HHS PRIORITY INVESTMENT TIMELINE

The following table lists all fiscal year 2008 major and tactical IT investments at HHS, grouped according to HHS Segment.

Table 7: Planned Completion for HHS Priority IT Investments

HHS Priority IT Investments	Planned Completion Timeline							
	2007	2008	2009	2010	2011	2012	2013	>2013
Segment: Planning and Accountability								
FDA IT Governance								
HHS Capital Planning and Investment Control								
HHS Enterprise Architecture Initiative								
HRSA Electronic Handbooks								
Segment: Information Resources Management								
CDC Information Technology Infrastructure								
CDC Enterprise Security								
CDC Secure Data Network (SDN)								
CMS Individuals Authorized Access to CMS Computer Services (IACS)								
CMS Information Technology Infrastructure								
CMS Medicare FFS IT Infrastructure								
CMS Modernized IT Infrastructure (Enterprise Data Centers)								
FDA Consolidated Infrastructure								
FDA IT Security Program								
HHS Enterprise E-mail System (HHSMail)								
HHSIdentity								
HHS Public Key Infrastructure (PKI) Project								
HHS Secure One HHS								
HHS Web Management								
HRSA General Support System								
NIH Information Technology Infrastructure								
OS IT Service Center (ITSC)								
Segment: Management of Government Resources								
CDC Integrated Contracts Expert (ICE)								
CMS Healthcare Integrated General Ledger Accounting System (HIGLAS)								
FDA MDI Security								
FDA Financial Enterprise Solutions								
HHS Consolidated Acquisition System (HCAS)								
HHS Asset - Property Management Information System								
HHS Human Resources LOB IT								

HHS Priority IT Investments	Planned Completion Timeline							
	2007	2008	2009	2010	2011	2012	2013	>2013
HHS Federal Health Architecture LOB								
HHS Unified Financial Management System (UFMS)								2017
NIH Business Intelligence System (NBIS)								
NIH CIT Central Accounting System (CAS)								
NIH CIT Administrative Database System (ADB)								
NIH OD NIH Business System (NBS)								
OS ASH Commissioned Officers Personnel and Payroll System (COPPS)								
PMA E-Gov Grants.gov - Find and Apply								
PMA PSC E-Gov Travel								
PSC Accounting for Pay System (AFPS)								
PSC Core Accounting System (CORE)								
PSC Debt Management and Collection System (DMCS)								
PSC Enterprise Human Resource System (EHRP)								
PSC Payment Management System (PMS)								
Segment: Access to Care								
HRSA Data Warehouse								
HRSA National Health Service Corps (NHSC) Information Systems - BHPR								
HRSA Office of Pharmacy Affairs Information System (OPAIS) - HSB								
SAMHSA - CSAP Data Coordination and Consolidation Center (DCCC)								
Segment: Health Care Administration								
HRSA National Practitioner Data Bank/Healthcare Integrity Protection DB								
HRSA Bone Marrow and Cord Blood - HSB								
HRSA Nursing Information System - BHPR								
CMS Data Management Operations - Beneficiary								
CMS Data Management Operations - Claims								
CMS Fee-For-Service Application Modernization								
CMS Integrated Data Repository (IDR)								
CMS Medicaid Data Systems								
CMS DME Claims Processing								
CMS Part A Claims Processing								
CMS Part B Claims Processing								
CMS Interoperability and Standardization - Claims								

HHS Priority IT Investments	Planned Completion Timeline							
	2007	2008	2009	2010	2011	2012	2013	>2013
CMS Interoperability and Standardization - Provider Identification								
CMS Drug Claims (DDPS)								
CMS Common Working File (CWF)								
CMS Medicare Appeals System (MAS)								
CMS Medicare Program Integrity								
CMS MMA Contracting Reform								
CMS Retiree Drug Subsidy								
CMS MMA Title I and Title II Applications								
CMS Beneficiary Enrollment and Plan Payment								
CMS Plan Enrollment (Health Plan Management System)								
CMS Q-net								
CMS Beneficiary e-Services								
IHS National Patient Information Reporting System - Maintenance & Enhancements								
Segment: Health Care Delivery Services								
IHS Resource and Patient Management System - Maintenance & Enhancements								
IHS Infrastructure, Office Automation & Telecommunications (IOAT)								
OS Nationwide Health Information Network (NHIN)								2014
OS Standards & Certification for Health IT								2014
Segment: Health Care Research & Practitioner Education								
AHRQ Medical Expenditures Panel Survey (MEPS)								
NIH CC Clinical Research Information System (CRIS)								
NIH OD Electronic Research Administration (eRA)								
NIH NCI Cancer Therapy Evaluation Program (CTEP)								
Segment: Population Health Management & Consumer Safety								
CDC PHIN: BioSense								
CDC PHIN: National Electronic Disease Surveillance System (NEDSS)								
CDC PHIN: National Environmental Public Health Tracking Network (NEPHTN)								
CDC PHIN: LRN Real Time Laboratory Information Exchange								
CDC Public Health Information Network (PHIN)								

HHS Priority IT Investments	Planned Completion Timeline							
	2007	2008	2009	2010	2011	2012	2013	>2013
CDC National Select Agent Registry (NSAR)								
CDC Health Impact Planning (HI.net/IRIS)								
CDC ATSDR Geographic Information System								
CDC Enterprise Communication Technology Platform (ECTP)								
CDC Knowledge Management Platform (formerly CDC Web Redesign)								
CDC National Health and Nutrition Examination Survey (NHANES)								
CDC National HealthCare Safety Network (NHSN)								
CDC National Vital Statistics System (NVSS)								
CDC Surveillance, Preparedness, Awareness and Response System for Vaccines (SPARx)								
CDC Technical Assistance Group (TAG)								
CDC Vaccine Ordering and Distribution System (VODS)								
CDC NCHSTP/GAP Country Specific Infrastructure								
CDC Stockpile Resource Planning System (SRP)								
CMS Health Care Quality Improvement								
FDA Emergency Operations Network								
FDA Automated Drug Information Management System								
FDA Automated Laboratory Management								
FDA CDER Post Marketing								
FDA FACTS@FDA								
FDA Mammography Program Reporting Information System								
FDA Regulatory Business Information Services (FY08)								
FDA Unified Registration and Listing System (FY08)								
FDA Mission Accomplishments and Regulatory Compliance Services (MARCS)								
Segment: Human Services								
ACF Expanded Federal Parent Locator Service (OCSE)								
ACF Grants Administration Tracking Evaluation System - Grants Center for Excellence								
SAMHSA - OAS National Survey on Drug Use and Health (NSDUH)								

Appendix B HHS INVESTMENT ALIGNMENT TO THE FEDERAL TRANSITION FRAMEWORK

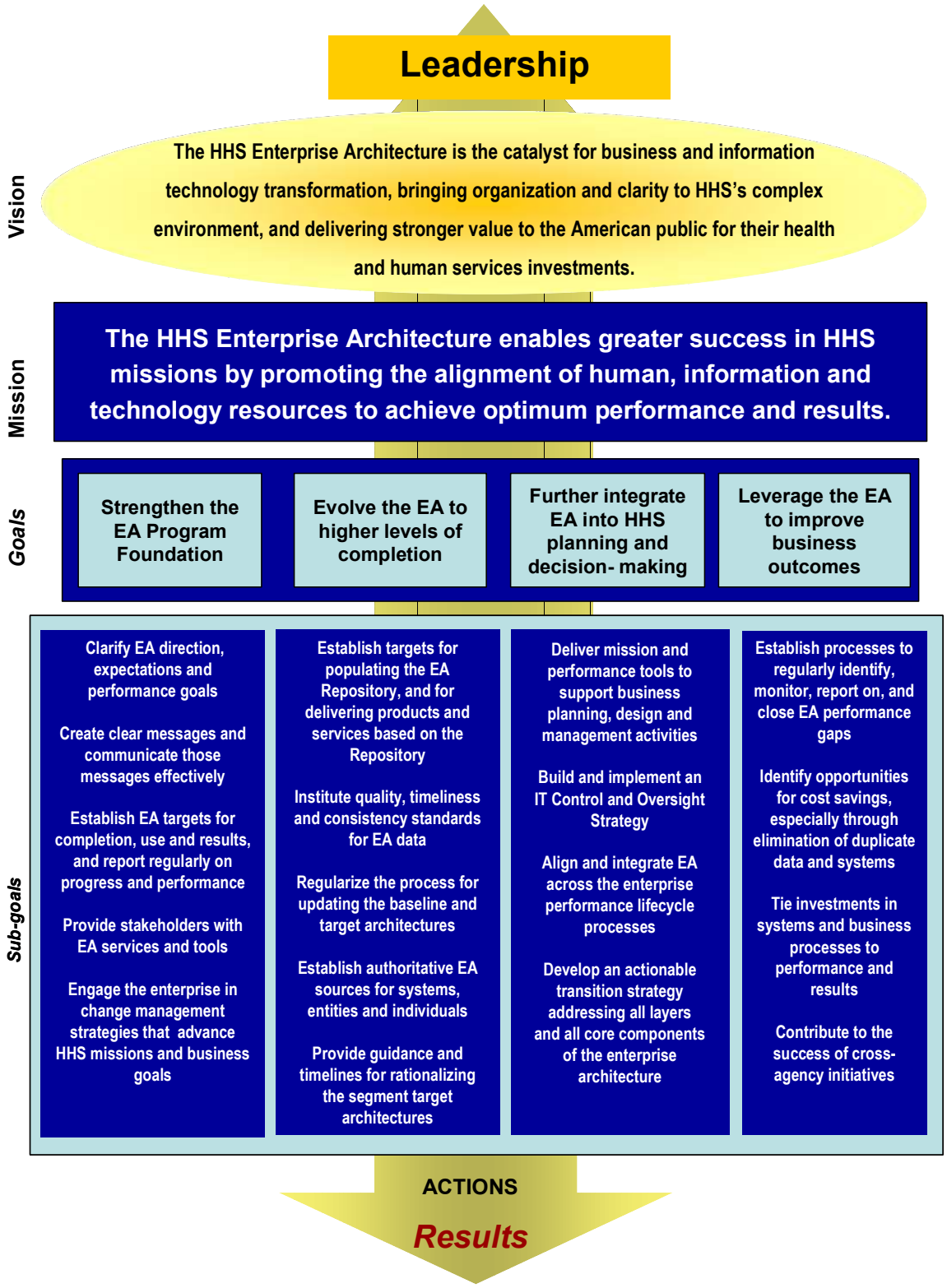
Table 8: HHS IT Investments Aligned to FTF Initiatives

FTF Initiative	Investment
Budget Formulation & Execution Line of Business	CDC Health Impact Planning (HI.net/IRIS)
	FDA Financial Enterprise Solutions (FES)
	FDA IT Governance
	Investment Planning/Management Support
E-Authentication	CDC Enterprise Security
	CDC Secure Data Network (SDN)
	CMS Authentication (IACS)
	FDA Electronic Submission Gateway (ESG)
	HHS Identity
Grants.gov	Grants.gov - Find and Apply
Human Resources (HR) Line of Business	HHS HR LOB
	PSC Enterprise Human Resource System (EHRP)
Geospatial One-Stop	CDC ATSDR Geographic Information System
Grants Management Line of Business (GM LOB)	ACF Grants Administration Tracking Evaluation System (GATES) - Grants Center for Excellence
	Grants Management and Tracking System
	NIH Electronic Research Administration (eRA)
Case Management (CM) Line of Business (LoB)	FDA Agency Information Management System (AIMS)
	FDA Mission Accomplishments and Regulatory Compliance Services (MARCS)
Disaster Management	CDC Enterprise Communication Technology Platform (ECTP)
	FDA Emergency Operations Network Incident Management System (EON IMS)
	FDA Unified Registration and Listing (FURLS)
	MDI Security
Federal Health Architecture (FHA)	CDC Enterprise Communication Technology Platform (ECTP)
	CDC Health Impact Planning (HI.net/IRIS)
	CDC Knowledge Management Platform (formerly CDC Web Redesign)
	CDC National Health and Nutrition Examination Survey (NHANES)
	CDC National Healthcare Safety Network (NHSN)
	CDC National Select Agent Registry (NSAR)
	CDC National Vital Statistics System (NVSS)
	CDC NCHSTP/GAP Country Specific Infrastructure
	CDC PHIN: BioSense
	CDC PHIN: LRN Real Time Laboratory Information Exchange

FTF Initiative	Investment
	CDC PHIN: National Electronic Disease Surveillance System (NEDSS)
	CDC PHIN: National Environmental Public Health Tracking Network (NEPHTN)
	CDC Public Health Information Network (PHIN)
	CDC Stockpile Resource Planning System (SRP)
	CDC Surveillance, Preparedness, Awareness, and Response System for Vaccines (SPARx)
	CDC Technical Assistance Group (TAG) (formerly HAN and TADA)
	CDC Vaccine Ordering and Distribution System (VODS)
	CDER Postmarketing
	CDRH Electronic Submissions (CeSub)
	Center Legacy Applications and Support Systems (CLASS)
	Center Tracking System (CTS)
	CFSAN CAERS (FY08)
	CFSAN FARM (FY08)
	CMS Interoperability & Standardization - Claims
	CMS Interoperability & Standardization - Provider ID (NPPES)
	Compliance
	Content Management System
	Corporate Database Portal (CDP) (DME)
	Corporate Database Portal (CDP) Steady State
	Electronic Submission System
	Enterprise Architecture
	FACTS@FDA
	FDA Automated Drug Information Management System
	FDA Automated Laboratory Management (ALM)
	FDA CBER Electronic Submission Program (FY08)
	FDA CBER NonPDUFA Systems (FY08)
	FDA CBER PDUFA Systems (FY08)
	FDA CBER Regulatory Management System- BLA (FY08)
	FDA CFSAN Core IT (FY08)
	FDA CFSAN Supporting and Enabling IT (FY08)
	FDA Mission Accomplishments and Regulatory Compliance Services (MARCS)
	FDA Regulatory Business Information Services (RBIS)
	FDA Unified Registration and Listing (FURLS)
	ICD-10

FTF Initiative	Investment
	Mammography Program Reporting and Information System (MPRIS)
	Medical Product Surveillance Network (MedSuN)
	NCTR Research IT
	Premarket Modernization Program (PMP)
	Science FIRST
Financial Management (FM) Line of Business	CDC Health Impact Planning (HI.net/IRIS)
	CDC Integrated Contracts Expert (ICE)
	CMS Healthcare Integrated General Ledger Accounting System (HIGLAS)
	FDA Financial Enterprise Solutions (FES)
	FDA IT Governance
	HHS Unified Financial Management System
HSPD-12	CDC Enterprise Security
	CDC Secure Data Network (SDN)
	MDI Security
Information Systems Security Line of Business	CDC Enterprise Security
	CDC Secure Data Network (SDN)
	HHS Secure One HHS
	IT Security Program
Integrated Acquisition Environment (IAE)	FDA Financial Enterprise Solutions (FES)
	HHS Consolidated Acquisition System (HCAS)
E-Travel	FDA Financial Enterprise Solutions (FES)
	PMA PSC E-Gov Travel
IT Infrastructure Line of Business (LoB)	CDC Information Technology Infrastructure
	CMS Integrated Data Repository (Formerly Data Modernization)
	CMS Modernized IT Infrastructure (EDCs)
	Consolidated Infrastructure
Geospatial (Geospatial LOB)	CDC ATSDR Geographic Information System
Information Sharing Environment	FDA IT Governance
Internet Protocol Version 6 (IPv6)	CDC Information Technology Infrastructure
	Consolidated Infrastructure
	IPv6

Appendix C HHS ENTERPRISE ARCHITECTURE GOALS AND OBJECTIVES



Appendix D ACRONYMS AND ABBREVIATIONS

Table 9: Acronyms and Abbreviations

ACF	Administration for Children and Families
AOA	Administration on Aging
AHRQ	Agency for Healthcare Research and Quality
ASPR	Assistant Secretary for Preparedness and Response
ASRT	Assistant Secretary for Resources and Technology
ATSDR	Agency for Toxic Substances and Disease Registry
BRM	Business Reference Model
CCA	Clinger-Cohen Act of 1996 (Information Technology Management Reform Act)
CDC	Centers for Disease Control and Prevention
CEA	Chief Enterprise Architect
CFO	Chief Financial Officer
CHI	Consolidated Health Informatics
CIO	Chief Information Officer
CISO	Chief Information Security Officer
CMS	Centers for Medicare and Medicaid Services
CPIC	Capital Planning and Investment Control
CRM	Consolidated Reference Model
CTO	Chief Technology Officer
DASIT	Deputy Assistant Secretary for Information Technology
DRM	Data Reference Model
E-Gov	Electronic Government
EA	Enterprise Architecture
EHRP	Enterprise Human Resources and Personnel System
EPLC	Enterprise Performance Life Cycle
FDA	Food and Drug Administration
FEA	Federal Enterprise Architecture
FHA	Federal Health Architecture
FIPS	Federal Information Processing Standard
FISMA	Federal Information Security Management Act of 2002 (E-Government Act)
FTF	Federal Transition Framework
GAO	Government Accountability Office
GPRA	Government Performance Results Act of 1993
HIPAA	Health Insurance Portability and Accountability Act of 1996
HITSP	Health Information Technology Standards Panel

HHS	Health and Human Services
HR	Human Resources
HRSA	Health Resources and Services Administration
HSPD-12	Homeland Security Presidential Directive 12
IHS	Indian Health Services
IRM	Information Resources Management
IT	Information Technology
ITIRB	Information Technology Investment Review Board
ITSC	Information Technology Services Center
LOB	Line of Business
NBS	NIH Business System
NIH	National Institutes of Health
NIST	National Institute for Standards and Technology
OCIO	Office of the Chief Information Officer
OEA	Office of Enterprise Architecture
OIG	Office of the Inspector General
OMB	Office of Management and Budget
ONC	Office of the National Coordinator for Health Information Technology
OPDIV	Operating Division
OS	Office of the Secretary
PMA	President's Management Agenda
PRM	Performance Reference Model
PSC	Program Support Center
RPMS	Resource and Patient Management System
SAMHSA	Substance Abuse and Mental Health Services Administration
SOA	Service-Oriented Architecture
SRM	Service Component Reference Model
SSP	Shared Service Provider
STAFFDIV	Staff Division
TRM	Technical Reference Model
UFMS	Unified Financial Management System

Appendix E REFERENCES

Table 10: References

Reference
HHS Information Resources Management Strategic Plan 2007-2012
HHS Performance Management Plan
HHS OCIO Policy for IT Capital Planning and Investment Control
HHS OCIO CPIC Procedures
HHS Enterprise Performance Life Cycle
HHS OCIO IT Policy for Enterprise Architecture
HHS Information Security Program Policy
HHS Transition Plan
HHS EA Program Management Plan
HHS EA Configuration Management Plan
HHS EA Communications and Outreach Plan
HHS EA Segment Architecture Development Methodology
HHS EA Framework
HHS EA Modeling Guide
Federal Enterprise Architecture Consolidated Reference Model v2.1
Federal Transition Framework v1.0
Federal Enterprise Architecture Practice Guidance